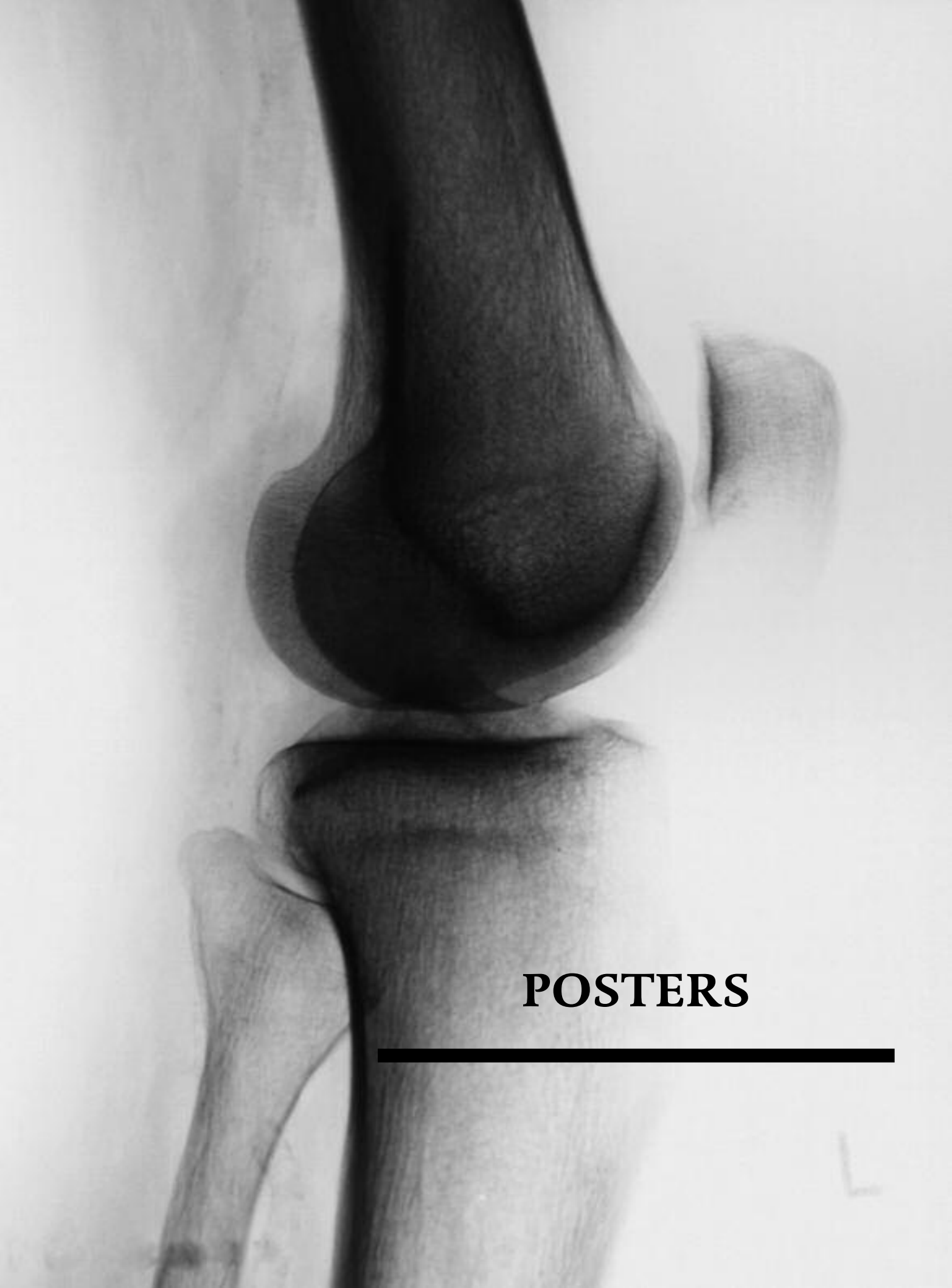

POSTERS

Posters

ACTA REUMATOL PORT. 2017:32:53-164 (SUP)

GRUPO 1

P3 – EVALUATING TRANSFER OF CERTOLIZUMAB PEGOL INTO BREAST MILK: RESULTS FROM CRADLE, A PROSPECTIVE, POSTMARKETING, MULTICENTER PHARMACOKINETIC STUDY

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Introduction: Breastfeeding women receiving anti-TNFs for chronic inflammatory disease face concerns surrounding their potential transfer into breast milk. For these women, postpartum flare is common. CRADLE was the first sponsored study designed to evaluate certolizumab pegol (CZP) concentrations in breast milk and to estimate average daily infant dose of maternal CZP (the daily amount of CZP potentially ingested by infants).
Methods: CRADLE (NCT02154425) was a pharmacokinetic and safety study of lactating mothers (≥6 weeks postpartum) receiving commercial CZP for an approved indication. Decision to treat with CZP and to breastfeed was independent of study participation. At steady-state (≥3 CZP doses), breast milk samples were collected at Days 0, 2, 4, 6, 8, 10, 12, 14 (±28) from each mother across 1 dosing period. Maternal burden was minimized through in-home visits with nurses. A highly sensitive CZP-specific detection assay was developed on a mesoscale discovery platform and validated in milk; it is approximately 10 times more sensitive than the originally-developed plasma method (LLOQ= 0.032 μg/ml). CZP stability in milk was confirmed.
Results: 18 CZP-treated mothers were screened; 17 entered the sampling period: 16 on 200mg Q2W and 1 on 400mg Q4W. 77 of 137 (56%) breast milk samples had no measurable CZP (below LLOQ of 0.032 μg/mL). 13 of 17 mothers had levels at least one time point (<2x LLOQ: 52/137 samples; <3x LLOQ: 8/137 samples; highest concentration: 0.076 μg/mL). Estimated Average Daily Infant Dose ranged from 00.0104mg/kg/day median relative infant dose (RID): 0.125%. Infants of CZP-exposed mothers had a safety

TABLE A. BASELINE CHARACTERISTICS OF MOTHERS AND INFANTS

	All mothers (n=18)[a]
Mean (SD), unless otherwise stated	
Age, years	33.7 (4.2)
Weight, kg	68.9 (9.6) [b]
BMI, kg/m²	23.6 (3.0) [b]
Mother's indication for CZP treatment, n [b]	
Rheumatoid arthritis	7
Crohn's disease	5
Psoriatic arthritis	3
Axial spondyloarthritis/ankylosing spondylitis	2
	All Infants (n=17)
Mean (SD), unless otherwise stated	
Female, n (%)	11 (64.7)
Gestational age at birth, weeks	39.9 (0.8)
Weight at birth, kg	3.4 (0.5)

[a] Includes 1 screen failure; [b] n=17

TABLE B. CONCENTRATIONS OF CZP (µG/mL) IN BREAST MILK AFTER ADMINISTRATION OF CZP DOSE IN MOTHERS

	Relative time (days)								
Patient	0	2	4	6	8	10	12	14	28
1	0.057	0.051	0.066	0.065	0.062	0.056	0.052	0.041	–
2	BLQ	BLQ	0.035	0.037	0.041	BLQ	0.043	BLQ	–
3	BLQ	0.032	0.049	0.053	0.037	0.037	0.033	0.033	–
4	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	–
5	0.056	0.069	0.074	0.076	0.076	0.069	0.069	0.060	–
6	BLQ	BLQ	0.044	0.048	BLQ	BLQ	BLQ	BLQ	–
7	BLQ	BLQ	BLQ	BLQ	BLQ	0.035	BLQ	BLQ	–
8	BLQ	BLQ	0.035	0.034	0.043	BLQ	BLQ	BLQ	–
9	0.039	0.040	0.047	0.045	0.042	0.043	0.038	0.035	–
10	BLQ	BLQ	BLQ	0.033	0.042	0.042	BLQ	BLQ	–
11	BLQ	BLQ	0.051	0.038	0.042	BLQ	0.033	BLQ	–
12	BLQ	BLQ	0.034	0.037	0.033	BLQ	BLQ	BLQ	–
13	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	–
14	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	–
15	BLQ	BLQ	0.041	0.034	0.033	BLQ	0.037	BLQ	–
16	0.040	0.033	0.036	0.037	0.043	BLQ	BLQ	BLQ	–
17	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

Key: BLQ (<0.032 µg/mL) Less than 2×LLQ (<0.064 µg/mL) Less than 3×LLQ (<0.096 µg/mL)
Days 0 and 14 are pre-dose for mothers on CZP 200 mg Q2W dosing regimen;
Days 0 and 28 are pre-dose for the mother on CZP 400 mg Q4W dosing regimen.
BLQ: below the limit of quantification, <0.032 µg/mL; LLQ: lower limit of quantification.
For reference, the mean 12-week CZP plasma C_{trough} value, ie. the trough concentration at steady-state, reported from patients with rheumatoid arthritis receiving CZP 200 mg Q2W in the RAPID2 trial was 15.7 µg/mL (95% CI: 14.0, 17.7).[2]

TABLE C. SUMMARY OF ADVERSE EVENTS FROM THE SAFETY SET DURING THE CRADLE STUDY (FROM SCREENING TO SAFETY FOLLOW-UP)

	Mothers (n=18) n (%)	Infants (n=17) n (%)
Any adverse event	10 (55.6)	8 (47.1)
Intensity		
Mild	3 (16.7)	6 (35.3)
Moderate	6 (33.3)	2 (11.8)
Severe	1 (5.6) [a]	0
Serious adverse events	1 (5.6) [a]	0
Discontinuations due to adverse events	1 (5.6) [b]	0
Drug-related adverse events	4 (22.2)	1 (5.9)
Herpes zoster	1 (5.6)	–
Crohn's disease flare	1 (5.6)	–
Upper respiratory tract infection	2 (11.1)	–
Pneumonia	1 (5.6)	–
Nasopharyngitis	–	1 (5.9)
Adverse events of interest [c]	0	0
Deaths	0	0

Adverse events are reported from the Safety Set, which included all mothers who received at least 1 dose of CZP, and the infants of all mothers who participated in the study. The safety follow-up period extended up to 5 weeks (±5 days) after the final sample was obtained. [a] Breast abscess during screening period, which resolved prior to sampling; [b] Herpes zoster during screening period resulting in screen failure; [c] Includes any opportunistic infections, any malignancies (including unspecified), any major adverse cardiac events, any hematopoietic cytopenias, any serious bleeding events, any hepatic events, and any injection or injection site reactions in mothers.

profile consisting of events occurring in unexposed infants of similar age.

Conclusion: Using the highly sensitive assay, CZP was undetectable in 56% of milk samples collected. When detectable, CZP concentrations were <3x LLQ (<1% of expected plasma concentration of a therapeutic dose), indicating no to minimal transfer of CZP from plasma to breast milk. RID was below 0.5% of maternal dose <10% is considered unlikely to be of clinical concern. In addition, CZP absorption by infants via breast milk is unlikely due to the low oral bioavailability of biologics and its Fcfree molecular structure.

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P24 – CERTOLIZUMAB PEGOL IS ASSOCIATED WITH LONG-TERM IMPROVEMENTS IN EXTRA-ARTICULAR MANIFESTATIONS OF PSORIATIC ARTHRITIS OVER 4-YEARS OF TREATMENT

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Background: Extra-articular manifestations (EAMs) of psoriatic arthritis (PsA) include skin and nail psoriasis, dactylitis and enthesitis, which can significantly impact patients' (pts) quality of life[1]. Previous reports have shown that PsA pts treated with certolizumab pegol (CZP) experience rapid improvements in EAMs and that these are maintained over 96 weeks (wks) of treatment[2]. Here we investigate the long-term effect of CZP treatment on EAMs over 4 years.

Methods: The RAPID-PsA trial (NCT01087788) was double-blind and placebo-controlled to Wk24, dose-blind to Wk48 and open-label (OL) to Wk216. Pts had active PsA and had failed ≥1 DMARD. Pts originally randomized to CZP (200 mg Q2W or 400 mg Q4W, following 400 mg loading dose at Wks 0, 2, 4) continued their assigned dose in the OL period. We present EAM data for those pts originally randomized to CZP and with involvement of the respective EAM at baseline (BL). EAMs assessed include psoriasis (body surface area affected [BSA], BL involvement = BL BSA ≥3%), nail psoriasis (modified nail psoriasis severity index [mNAPSI], BL involvement = BL mNAPSI >0; for some pts the nail analyzed changed once or more following BL assessment), enthesitis (Leeds enthesitis index [LEI], BL involvement = BL LEI >0) and dactylitis (Leeds dactylitis index [LDI], BL involvement = ≥1 di-

TABLE. IMPROVEMENTS IN EXTRA-ARTICULAR MANIFESTATIONS OF PSA OVER 216 WEEKS OF CZP TREATMENT (OBSERVED VALUES)

Mean score (number of patients) Total resolution %	CZP 200 mg Q2W Week 12	CZP 200 mg Q2W Week 24	CZP 200 mg Q2W Week 96	CZP 200 mg Q2W Week 216	CZP 400 mg Q4W Week 12	CZP 400 mg Q4W Week 24	CZP 400 mg Q4W Week 96	CZP 400 mg Q4W Week 216
Nail Psoriasis	1.7 (88)	1.4 (86)	0.7 (75)	0.4 (65)	2.5 (95)	1.3 (93)	0.7 (83)	0.4 (67)
mNAPSI=0 (%)	21.6	34.9	65.3	69.2	18.9	41.9	65.1	73.1
Enthesitis	1.2 (84)	1.0 (82)	0.8 (68)	0.6 (57)	1.3 (78)	1.1 (76)	0.7 (63)	0.4 (53)
LEI=0 (%)	58.3	65.9	70.6	77.2	50.0	64.5	71.4	77.4
Dactylitis	15.8 (33)	4.5 (31)	0 (29)	1.4 (27)	11.6 (36)	0.5 (34)	0 (28)	0.6 (23)
LDI=0 (%)	51.5	74.2	89.7	92.6	41.7	73.5	89.3	91.3
Psoriasis [a]	9.5 (85)	5.4 (83)	3.5 (77)	2.6 (67)	10.8 (68)	5.9 (66)	3.8 (58)	3.3 (42)
0% BSA (%)	17.6	33.7	50.6	44.8	10.3	18.2	46.6	42.0

[a] BSA data shown as % rather than mean score. mNAPSI scale for affected nail: 0-13; LEI scale: 0-6; LDI measured as: percentage difference between circumference of affected digit and contralateral digit, multiplied by tenderness score (0 for non-tender, 1 for tender). Final LDI score = sum of results from all digits with dactylitis. All EAMs were only assessed in those patients with involvement of the respective EAM at baseline.

git affected and with a difference in circumference ≥10%). Data are also presented showing the proportion of pts with BL involvement of each EAM who achieve total resolution (ie. complete clearance) of the respective EAM on follow-up (a score of 0 for mNAPSI, LEI or LDI, or 0% BSA). Data shown are observed values.

Results: A total of 409 PsA pts were randomized, of whom 273 received CZP from Wk0. Of CZP-randomized pts, 166 had psoriasis at baseline, 197 nail psoriasis, 172 enthesitis and 73 dactylitis. A large proportion of pts with baseline involvement went on to achieve total resolution of the respective EAM by Wk24. The proportion of pts with total resolution increased from Wk24 to Wk216 following treatment with either CZP dose regimen (Table). Mean scores in all EAMs assessed showed improvements by Wk12. Improvements in psoriasis, nail psoriasis, enthesitis, and dactylitis were subsequently maintained to Wk216 for those pts completing the study (Table).

Conclusion: Patients treated with CZP had improvements in all EAMs assessed, which were maintained over 4 years of the RAPID-PsA trial in those pts completing to Wk216.

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P64 – EFFECTIVENESS OF EARLY ADALIMUMAB THERAPY IN PSORIATIC ARTHRITIS PATIENTS FROM REUMA.PT – EARLY PSA

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There is a lack of evidence on the effect of biologics in early treatment of psoriatic arthritis (PsA) patients. Furthermore, the benefit of concomitant use of conventional synthetic disease-modifying drugs (csDMARDs) remains controversial in this indication.

Objective: To compare clinical outcomes in patients with PsA starting adalimumab (ADA), with short and long disease duration. Additionally, to evaluate the potential effect of concomitant use of csDMARDs or glucocorticoids, both on PsARC response and persistence on ADA.

The analyses included adult PsA patients who have been registered on the Rheumatic Diseases Portuguese Register (Reuma.pt) between June 2008 and June 2016 and have received ADA therapy for at least 3 months. Psoriatic Arthritis Response Criteria (PsARC), disease activity score using 28 joint counts (DAS28), tender and swollen joint count, inflammatory parameters (erythrocyte sedimentation rate and C-reactive protein), patient (PtGA) and physician global assessment (PhGA) evaluated on a 10 cm visual analogue scale (VAS), and health assessment questionnaire (HAQ) were compared between patients with less than 5 years of disease (early PsA) and those with 5 or more years of disease duration (late PsA) when starting ADA. Time to achieve PsARC response was estimated using the Kaplan-Meier method and adjusted with Cox Regression with Efron method for ties with robust estimates of variance for baseline characteristics. The same analyses were repeated to compare patients with and without concomitant use of csDMARDs or glucocorticoids.

Results: We included 135 PsA patients who started ADA, 41 of them with early PsA. Patients with early PsA were younger, more frequently males, smokers and had significantly more hypertension. Overall, PsARC response was achieved by 72.9% of the patients (88% early PsA *vs* 62.2% late PsA; p=0.022) at 3 months and by 85.4% of patients at 24 months (100% early PsA *vs* 75.9% late PsA; p=0.044) after starting ADA. Patients with early PsA, achieved significantly less painful joints

TABLE I. DISEASE CHARACTERISTICS BY PSA DISEASE DURATION AND RESPONSE TO ADALIMUMAB. ADJUSTED FOR AGE OF BEGINNING OF TREATMENT WITH BIOLOGIC AGENTS, GENDER, SMOKING HABITS, AND BMI

	Baseline Disease duration			3 months Disease duration				2 years Disease duration			
	<5 years n=34	>5 years n=75	p-value	<5 years n=30	>5 years n=66	Adjusted p-value	p-value	<5 years n= 19	>5 years n=46	p-value	Adjusted p-value
DAS28, mean (SD)	4.9 (1.4)	5.0 (1.4)	0.717	3.0 (1.4)	3.5 (1.6)	0.154	0.942	2.2 (1.0)	3.2 (1.6)	0.030	0.167
Painful Joints, mean (SD)	10.2 (8.4)	11.3 (10.8)	0.554	2.7 (3.5)	6.7 (10.0)	0.006	0.976	0.4 (0.8)	2.7 (4.7)	0.150	0.249
Swollen Joints, mean (SD)	6.1 (4.2)	5.8 (6.2)	0.756	1.4 (2.0)	1.9 (2.2)	0.271	0.725	0.3 (0.7)	1.7 (0.4)	0.002	0.555
PtGA, mean (SD)	60.2 (23.5)	60.3 (23.4)	0.978	30.4 (22.6)	40.4 (23.6)	0.066	0.230	23.7 (22.1)	34.5 (29)	0.192	0.957
PhGA, mean (SD)	50.7 (20.4)	48.3 (22.8)	0.633	18.3 (17.4)	28.1 (17.9)	0.020	0.043	6.3 (5.2)	21.9 (23.4)	0.000	0.212
HAQ, mean (SD)	1.0 (0.7)	1.1 (0.7)	0.554	0.6 (0.7)	0.8 (0.7)	0.212	0.599	0.4 (0.5)	0.8 (0.7)	0.119	0.753
CPR mg/dl, mean (SD)	1.7 (2.1)	2.0 (1.9)	0.490	0.5 (0.8)	1.3 (2.1)	0.011	0.134	0.4 (0.4)	1.0 (1.6)	0.026	0.301
ESR, mean (SD)	31.8 (22.2)	36 (25.8)	0.438	16.4 (14.1)	22.9 (20.7)	0.13	0.512	17.7 (21.7)	27.6 (25.9)	0.179	0.263
PsARC yes, n (%)			NA	22 (88.0)	28 (62.2)	0.022	0.043	14 (100)	22 (75.8)	0.044	NA

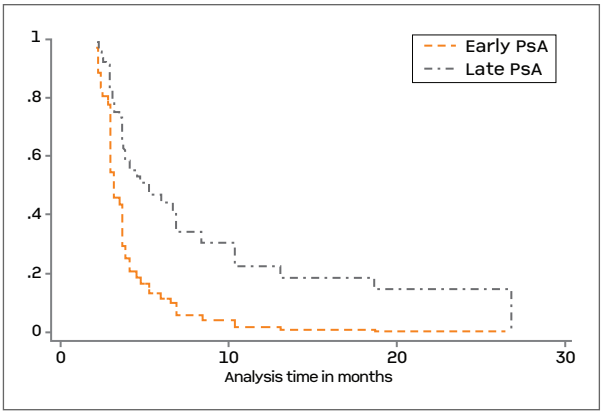

FIGURE. Time from the use of adalimumab to PsARC achievement, by years of disease duration until biologic treatment, adjusted

(2.7 *vs* 6.7; p=0.006), lower mean C-reactive protein (0.5 mg/dl *vs* 1.3 mg/dl, p=0.011) and PhGA (18.3 *vs* 28.1; p=0.020) at 3 months. In the long term, early PsA patients also showed less swollen joints (0.3 *vs* 1.7; p=0.030), lower PhGA (6.3 *vs* 21.9; p<0.001), C-reactive protein (0.4 mg/dl *vs* 1.0 mg/dl; p=0.026) and disease activity evaluated by DAS28 (2.2 *vs* 3.2; p=0.030).

Early PsA patients obtained PsARC response more rapidly than those with late PsA (3.8 and 7.4 months, respectively; p=0.008).

Concomitant csDMARDs, in the long term, showed clinical benefit (PsARC response at 2 years 88.3% *vs* 60.0%; p=0.044). Concomitant glucocorticoids had no noticeable effect on PsARC response, over two years of follow-up.

Survival on treatment with ADA was similar in the 2 groups and was not influenced by csDMARD or glucocorticoid therapy.

Conclusion: Patients with early PsA had greater chance of improvement after starting ADA, better functional outcome and achieved PsARC response more rapidly than patients with longer disease duration. Our results suggest that comedication with csDMARDs may improve PsARC response in the long term.

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P62 – B-CELL SUBSETS DIFFERENCES IN INFLAMMATORY RHEUMATIC DISEASES

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Background: Targeting humoral immunity has been proved effective in several inflammatory rheumatic diseases (IRD). Though clinical trials have shown some efficacy of B-cell depletion in ankylosing spondylitis (AS), results are less convincing. Other studies have revealed an association between mutations and expression of immune regulatory genes suggesting B-cell dysfunction in the development and progression of AS. Yet, there is still lack of data describing B-cell subsets in AS, how these compare to other IRD and an evaluation of B cell compartment homeostasis in the pathophysiology of this disease.

Objectives: To assess and compare the immature, naive and antigen differentiated subsets of peripheral B-cell compartment in AS with those in healthy controls (HC) and other IRD

Methods: Patients (pts) with AS, RA and SLE according to respective classification criteria were included in this study. Pts under biologic DMARDS were not included. Sociodemographic and clinical variables were recorded. Blood samples were collected for quantification of inflammatory markers (ESR and CRP), immunoglobulin serum levels and assessment of B-cell immature transitional stages and mature subsets by flow cytometry (figure). Mann-Whitney and Fisher s exact test were used for comparison of AS with other groups

Results: Overall, 60 pts and 12 HC were included (Table). All patient groups presented similar and rather low levels of inflammation, as measured by CRP, ESR and immunoglobulins, in addition to a decreased lymphocyte count by comparison with HC. There were no differences in the B-cell counts between AS pts and HC,

with both groups having higher B-cell counts than RA and SLE pts. Regarding B-cell subsets, the immature transitional compartment of AS pts was found in normal range, but not in the RA and SLE groups. In fact, the latter presented a significant decrease in all transitional cell maturity stages (T1-T3). The next step in B-cell differentiation is mature naïve cells, also found in normal levels in AS and decreased in RA and in particular in SLE. AS pts presented slightly higher counts of CD27+IgD+ MZ-like and class able to switch memory cells with reference to HC and these cell numbers were found to be low in RA and even lower in SLE pts. Switched memory CD27+IgD- B-cells were reduced in all patient groups, however, only SLE pts presented highly decreased cell levels

Conclusions: We found that while a severe dysfunction is present in the homeostasis of the B-cell compartment in RA and in particular SLE pts, which are lymphopenic in both immature and mature B-cell compartments, it appears that AS pts are not affected in the same way. At this stage, functional studies appear to be necessary in order to identify differences in key mechanisms of B cell development and differentiation that may play a role in the aetiology and progression of these inflammatory rheumatic diseases. Our first results, however, establish that pathophysiological mechanisms involving B-cells clearly differentiate AS from RA and SLE

TABLE. PATIENT AND HEALTHY CONTROLS DEMOGRAPHICS, CLINICAL VARIABLES AND ABSOLUTE CELL COUNTS

	AS (n=22)	RA (n=20)	SLE (n=18)	HC (n=12)
Patients				
Male, Female; n (%)	11 (50); 11 (50)	9 (45); 11 (55)	5 (27.8); 13 (72.2)	3 (30); 7 (70)
Age; median (IQR)	56 (45.8-65.5)	55 (51-65.5)	44 (37.5-52.5)*	60.5 (32-64.5)
ESR mm/hour	14 (10-29.3)	21 (10.3-37.8)	23 (6-34.5)	11 (8-22.5)
HLA B27$^+$:n (%)	1.1 (0.9-1.7)	0.98 (0.7-3.2)	0.6 (0.5-1.6)	–
CRP mg/dL	11 (68.8)	–	–	–
With csDMARS, n (%)	6 (30)	18 (90)	15 (83.3)	0
Ig seric levels, mg/c11; median (IQR)				
IgG	1165 (881.3-1247.5)	1021 (830.3-1265)	1140 (1003-1325	1033.5 (823.3-1235)
IgA	230 (158.8-340)	250.5 (164.3-315.3)	261 (205-323)	236.5 (150.3-339.8)
IgM	95.3 (65.6-119.5)	112 (67.7-164.8)	103 (60.6-131.5	122 (71.5-158.3)
Absolute cell counts/µl blood; median (IQR)				
Lymphocytes	1685 (1217-2007.5)	1555 (1097.5-2085)	1250 (625-1892.5)	2170 (1830-2377)**
Total B-cells (CD201	186.3(111-238.6)	96.2 (50.3-180.6)***	65.8 (20.9-116.1)***	182.1 (100.9-269.7)
Immature Transitional B-cells (CD5+CD27-1gD1, median (IQR)				
CD24^{+++}CD38^{+++}(T1)	2.8 (1.8-3.9)	0.6 (0.1-2.7)**	1.5 (0.2-2.8)**	4.3 (2.3-6.5)
CD24^{++}CD38^{++}(T2)	8.3 (5.1-14.9)	2.6 (0.2-8.0)**	3.0 (1.0-8.0)**	13.7 (5.7-18.8)
CD24^{+}CD38^{+}(T3)	9.0 (5.5-17.7)	2.2 (0.3-4.6)**	1.9 (0.2-3.7)**	7.7 (4.1-12.3)
Mature B-Cells, median (IQR)				
CD27$^-$IgD$^+$ *(naive)*	73.2 (49.7-121.7)	40.1 (19.2-76.9)**	27.2(11.9-57.1)†	78.6 (48.4-163.4)
CD27$^+$IgD$^+$ (mem. *MZ-like)*	25.9 (13.6-39.9)	13.5 (3.5-27.2)**	2.6 (1.8-9.6)†	18.9 (11.2-27.1)
CD27$^+$IgD$^-$ *(switch mem.)*	18.8 (12.2-37.9)	13.5 (3.9-37.6)	4.9 (2.2-17.2)***	29.3 (14.51-37.9)
CD27$^-$IgD$^-$ *(double neg.)*	2.4 (1.8-5.2)	3.1 (2.0-6.4)	2.9 (1.0-5.0)	5.2 (2.6-8.1)

Mann Whitney and the Fisher's exact test were used for comparison between AS and other groups
*p<0.05; **p<0.02; ***p<0.01; †p<0.0001;

P190 – PATIENTS WITH SENSORINEURAL HEARING LOSS: BENEFITS OF A COLLABORATIVE WORK FOR SYSTEMIC EVALUATION - EXPERIENCE OF A SINGLE TERTIARY-CENTER

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Background: Sensorineural hearing loss (SNHL) is a serious condition, sometimes associated with systemic immune-mediated diseases (SIMD). These patients are seen mainly at the Otorhinolaryngology (ORL) emergency. After a quick clinical assessment an audiogram is done in the first 24 hours. Patients suspected of SNHL usually start prednisolone (PDN) 1 mg/Kg/day with rapid tapering. Clinical evaluation for possible SIMD depends afterwards on Rheumatology approach.
Aims: To characterize the patients with SNHL referred from ORL to our Rheumatology Department in the last 6 years, regarding symptoms, immunologic findings, established diagnosis and response to treatment. To elaborate a clinical evaluation protocol that standardizes procedures.
Methods: Input from ORL evaluation took place at a preliminary meeting where the aims of collaborative work were addressed. We retrospectively reviewed the clinical records of all patients with SNHL referred to our Rheumatology Department since 2011. Analysis included demographic and clinical data, namely associated symptoms (ear or systemic), laterality, treatment, evolution, laboratory profile and the presence of associated SIMD.
Results: Twenty-four patients were identified and 17 (71%) were females. The average age at diagnosis of SNHL was 44.3 years. Thirteen patients (54.2%) had bilateral ear involvement (4 with unilateral involvement at the beginning that later progressed to the other ear, whereas others had bilateral involvement with asymmetric fluctuant progression). Unilateral ear involvement persisted during follow-up in 5 patients. Median erythrocyte sedimentation rate at SNHL diagnosis was 12mm and median C-reactive protein was 0.35 mg/dL. Steroids were used at diagnosis in 21 patients (87.5%), mostly at a PDN equivalent dosage of 1 mg/Kg/day (12 patients, 50%) and immunomodulators in 14 patients (58.3%), most often methotrexate (11 patients, 45.8%). Only 2 patients had complete reversal of hearing loss (8.3%), while 10 patients had partial improvement (41.7%) and 11 remained with their deficits unchanged (45.8%). Despite a high suspicion of a SIMD along with SNHL expression, serum autoantibodies were found in a small subset of patients: 4 (16.7%) had positive antinuclear antibodies, 2 (8.3%) positive antiphospholipid (APL) antibodies, 1 (4.2%) anti-dsDNA antibodies, none had ANCA. Three out of 12 tested patients (25%) had anti-HSP70 antibodies (specific for cochlear antigens). Idiopathic SNHL was the final diagnosis of 9 patients (37.5%). One patient lost follow-up and all others (58.3%) were diagnosed with a systemic condition or strongly suspected of having one. Cogan's syndrome was the most frequent (1 patient, 5 suspected cases), followed by APL syndrome (1 patient, 1 suspected case), single cases of Takayasu arteritis, systemic lupus erythematosus, ankylosing spondylitis and suspected cases of granulomatosis with polyangiitis (GPA), eosinophilic GPA and Behçet disease.
Discussion: Evaluation of patients with SNHL has been a challenge in our Rheumatology practice. The absence of guidelines maybe a handicap for quality assessment. There are no uniform procedures or timings for therapeutic approach, particularly in patients with Idiopathic SNHL. While Rheumatology evaluation is determinant when a SIMD is diagnosed or strongly suspected, we miss solid scientific evidence to support the management of these patients. A collaborative clinical algorithm tool is now being developed in order to improve patients' outcomes.

P108 – THE ADDED VALUE OF A VASCULITIS CLINIC IN A TERTIARY REFERRAL HOSPITAL

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Background: The vasculitides represent a group of relatively uncommon conditions with different manifestations and outcomes. Its incidence in the Portuguese population is still unknown and there was no ex-

TABLE. DEMOGRAPHICS, CLINICAL MANIFESTATIONS, DIAGNOSTIC TESTS FINDINGS AND TREATMENT OF THE PATIENTS WITH A DIAGNOSIS OF SYSTEMIC VASCULITIS

	LVV		MVV	SVV		VVV	
	GCA	TAK	PAN	AAV	Other	BD	CS
Demographics	**n=34**	**n=12**	**n=5**	**n=16**	**SVV n=7**	**n=18**	**n=1**
Mean age at onset, years (SD)	75 (7)	26 (12)	36 (24)	51 (17)	30 (20)	24 (15)	26
Female (%)	18 (53)	11 (92)	4 (80)	14 (88)	2 (29)	13 (72)	1 (100)
Clinical manifestations (%)							
General							
Systemic	29 (85)	7 (58)	5 (100)	7 (44)	3 (43)	4 (22)	1 (100)
Musculoskeletal	19 (56)	3 (25)	3 (60)	6 (38)	3 (43)	10 (56)	1 (100)
Cutaneous		1 (8)	5 (100)	6 (38)	7 (100)	16 (89)	1 (100)
Mucous membranes/Eyes							
Mucosal				1 (6)		18 (100)	1 (100)
Ocular	21 (62)	2 (17)	1 (25)	1 (6)		6 (33)	1 (100)
ENT				7 (44)			1 (100)
Chest		1 (8)		6 (38)		1 (6)	
Cardiovascular			1 (20)				
Abdominal					3 (43)	2 (11)	
Renal		4 (33)	3 (60)	9 (56)	2 (29)		
Nervous system	2 (6)	3 (25)	3 (60)	5 (31)		3 (17)	
Other*	18 (53)	10 (83)		2 (13)		4 (22)	
Diagnostic test findings							
ANCA positivity				13 (81)			
Compatible imagiology†	27/33 (82)	12 (100)	4 (80)				
Compatible biopsy	14/20 (70)	4/4 (100)	3/3 (100)	11/11 (100)	4/5 (80)		
Treatment (%)							
Glucocorticoids‡	34 (100)	11 (92)	5 (100)	16 (100)	6 (100)	17 (94)	1 (100)
Pulse therapy	10 (29)		2 (40)	4 (25)			
High-dose	33 (97)	10 (83)	4 (80)	16 (100)	2 (33)	4 (22)	1 (100)
Medium-dose	1 (3)	1 (8)	1 (25)		4 (67)	3 (17)	
Low-dose						9 (50)	
sDMARDs	12 (35)	8 (67)	5 (100)	12 (75)	2 (33)	9 (50)	1 (100)
Azathioprine		1 (8)	4 (80)	11 (69)	2 (33)	3 (17)	
Cyclosporine				1 (6)		2 (11)	
Hydroxychloroquine			1 (20)			1 (6)	
Methotrexate	12 (35)	8 (67)	5 (100)	6 (38)		3 (17)	1 (100)
Mycophenolate				1 (8)			
Oral cyclophosphamide			1 (20)	4 (25)		1 (6)	
Pulse cyclophosphamide		1 (18)	3 (80)	7 (44)			
Sulfasalazine						1 (6)	
bDMARDs		2 (17)	1 (20)	1 (6)			
Infliximab		1 (8)	1 (20)				
Rituximab				1 (6)			
Tocilizumab		1 (8)					
Other				2 (13)	3 (50)	18 (100)	
Colchicine					2 (33)	18 (100)	
IV immunoglobulin				1 (6)	1 (17)		
Plasmapheresis				1 (6)			

The clinical manifestations are grouped according to the items listed in the Birmingham Vasculitis Activity Score; the ones not included in the glossary are listed as "other". AAV: ANCA-associated vasculitis; bDMARDs / sDMARDs: biological / synthetic disease-modifying anti-rheumatic drugs; BS: Behçet syndrome; CS: Cogan syndrome; ENT: ear, nose and throat; GCA: giant cell arteritis; IV: intravenous; LVV: large vessel vasculitis; MVV: medium vessel vasculitis; PAN: polyarteritis nodosa; SVV: small vessel vasculitis; TAK: Takayasu arteritis; VVV: variable vessel vasculitis. * GCA: jaw and/or tongue claudication; TAK: limb claudication, absent pulse and/or asymmetric pulse or blood pressure in seven patients, granulomatous hepatitis in one patient; AAV: pulmonary hypertension in one patient, orbital pseudotumor in one patient; VVV: superficial or deep vein thrombosis. † GCA: ultrasonography showing hypoechoic halo of the arterial wall; TAK: angiography or computed tomography angiography showing vascular wall thickening or enhancement, occlusion of major aortic branches, aneurismal dilatation of the aorta or its branches; PAN: angiography showing multiple microaneurysms. † Pulse therapy if parenteral administration of ≥250mg of prednisone equivalent daily, for 3 to 5 days; high-, medium- or low-dose if >30mg but ≤100mg, >7.5mg but ≤30mg, or ≤7.5mg of prednisone equivalent daily, respectively. For oral formulations only the highest dose is considered.

pression of prevalence found in the study EpiReumaPt. In October 2011, our Department established a dedicated outpatient clinic for patients with vasculitis. Our main goals were to facilitate these patients' access to specialized care; collect standardized clinical data into our Portuguese Registry of Rheumatic Diseases – Reuma.pt/Vasculitis; promote multidisciplinary work; apply uniformed and structured assessments (such as the Birmingham Vasculitis Activity Score [BVAS] or the Vasculitis Damage Index [VDI]) and gather patients with rare conditions eligible for clinical trials and research studies.

Objectives: To describe the general functioning of our vasculitis clinic and characterize the patients followed over the last five years.

Methods: Data regarding demographics, diagnosis, classification criteria, imaging and laboratory outcome measures of disease activity, damage and treatment were collected. We performed a cross-sectional descriptive analysis of all patients followed at the clinic and registered in Reuma.pt/Vasculitis up to January of 2017. A list of the research studies or initiatives we have participated is presented.

Results: A total of 163 patients, with 831 visits, were followed. The mean age was 57±18 at last visit; 68% were females. Mean time of follow-up was 1.3±1.5 years. A total of 93 patients had a diagnosis of systemic vasculitis, according the 2012 Chapel Hill Consensus nomenclature, and are further analysed in the table, categorized according to vessel size. From the remaining 21 patients with the diagnosis of vasculitis, 11 had single-organ vasculitis, nine had vasculitis associated with systemic disease and one had drug-associated vasculitis. A total of 49 patients didn't have a final diagnosis of vasculitis. Assessment of the BVAS and VDI was available for all vasculitides as the Five Factor Score calculation of survival rate for ANCA-associated vasculitis and polyarteritis nodosa. Vascular ultrasound was available for most of the large vessel vasculitis. Treatment for the majority of patients is detailed in the table; four patients were treated with biologic disease-modifying anti-rheumatic drugs. Thirty-six patients were discharged, 16 lost follow-up and three died.

In collaboration with the University of Oxford we have participated in the TABUL study (Temporal Artery Biopsy *vs* ULtrasound in diagnosis of giant cell arteritis), DCVAS (Diagnostic and Classification Criteria for Primary Systemic Vasculitis), and PROTEA (PROgnosis of Temporal Arteritis). These studies have led to the creation of a biobank storage of serum and DNA from patients with vasculitis. Our group have also been part of the EUVAS (European Vasculitis Study Group) and of the OMERACT Ultrasound large vessel vasculitis task force.

Conclusions: The vasculitides remain an important diagnostic challenge. The systematic approach of patients with vasculitis, with rigorous and careful systemic evaluation, is enabled within a vasculitis clinic. Further knowledge development is eased by continued collaboration in research studies and use of registries, such as Reuma.pt/Vasculitis, adapted for routine care.

P16 – ASAS HEALTH INDEX FOR PATIENTS WITH SPONDYLOARTHRITIS: TRANSLATION INTO PORTUGUESE, VALIDATION, AND RELIABILITY

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Background: The Assessment of SpondyloArthritis international Society Health Index (ASAS HI), is a unidimensional questionnaire, that includes 17 items, measuring functioning and health in patients with spondyloarthritis (SpA) (1). At the beginning of this project, only an English version of the instrument existed.

Objectives: The aim of this study was to conduct the cross-cultural adaptation of the ASAS-HI into European Portuguese language and investigate its reliability and validity in a sample of Portuguese patients with SpA.

Methods: The ASAS-HI has a range from 0 (best health

TABLE 1. CORRELATION BETWEEN ASAS-HI AT BASELINE AND OTHER HEALTH OUTCOMES

Characteristics	R	P value
BASDAI (0-10)	0.76	<0.001
BASFI (0-10)	0.63	<0.001
ASDAS-CRP	0.64	<0.001
SF-36 (physical) (0-100)	-0.75	<0.001
SF-36 (mental) (0-100)	-0.44	<0.001
HAD-S Anxiety	0.41	<0.001
HAD-S Depression	-0.05	0.660

95%CI=0.89;0.96, p<0.001) and a good internal consistency (Cronbachs-α of 0.87). According to the predefined hypothesis, the ASAS-HI correlated strongly with the BASDAI (0.76, p< 0.001), SF-36 (physical) (-0.75, p< 0.001), moderately well with the HAD-S Anxiety (0.41, p<0.001), and SF-36 (mental) (-0.44, p< 0.001) (Table 1), and showed a good discriminatory capacity across the different levels of disease activity (p<0.001) (Table 2).

Conclusions: The findings of this study showed that the Portuguese version of the ASAS –HI is a comprehensible questionnaire that is reliable and valid. Therefore, its use can be recommended, both for clinical practice and research purposes, to assess the state of health and functioning in Portuguese SpA patients. Future research is needed to evaluate the responsiveness of the ASAS-HI in SpA patients.

TABLE 2. DISCRIMINANT ABILITY OF ASAS-HI (AT BASELINE) STRATIFIED BY DISEASE ACTIVITY (MEAN±SD)

	ASDAS-CRP				
	Inactive (N=9)	Moderate (N=30)	High (N=32)	Very high (N=6)	p-value
ASAS-HI	1.6 (1.5)	2.3 (2.0)	6.2 (4.1)	8.1 (3.3)	<0.001

state) to 17 (worst health state). The questionnaire was first translated and then back translated following published guidelines. Patients fulfilling ASAS classification criteria for either axial (axSpA) or peripheral SpA (pSpA) were included. Reliability was assessed through internal consistency coefficient, and internal consistency was assessed using Cronbach's alpha. Construct validity was assessed through Spearman's correlation analyses between the ASAS-HI and the Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), Bath Ankylosing Spondylitis Functional Index (BASFI),

Ankylosing Spondylitis Disease Activity Score-CRP (ASDAS-CRP), and the Short Form (36) Health Survey (SF-36) (physical) SF-36 (physical) for convergent validity and between the ASAS-HI and the HAD-S Anxiety/Depression, and SF-36 (mental) for divergent validity. Discriminative validity was tested comparing the ASAS-HI across ASDAS-CRP disease activity states using the Kruskal–Wallis test.

Results: In total, 86 patients were included: 65% male, mean (SD) age 47.1 (12.9) years, symptom duration 11.4 (11.0) years, BASDAI 3.1 (2.1), BASFI 2.2 (2.6), ASDAS-CRP 2.2 (0.8). The diagnosis of axSpA was established in 58 patients (AS =45, nraxSpA=13) and of pSpA in 28 patients. The forward backward translation was successful and qualitative interviews raised no further comments of the patients. The total mean score of the ASAS-HI was 4.6 (3.8). The ASAS- HI showed an excellent test-retest reliability (n=72) (ICC= 0.93:

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P91 – PREDICTORS OF NEUROPATHIC PAIN IN RHEUMATOID ARTHRITIS

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Introduction: Significant pain persists in a substantial proportion of Rheumatoid Arthritis (RA) patients in spite of disease remission. Recent evidence indicates that features suggestive of neuropathic pain (NP) are present in RA patients with a prevalence range of 33--38% using the painDETECT questionnaire (PDQ).

Objectives: To estimate the clinical predictors of NP in

a cohort of RA patients.
Methods: Observational, cross-sectional study was performed with RA patients followed at our Rheumatology department with unchanged DMARD treatment during the last 3 months. Patients with diagnosed neuropathy or non-RA risk factors for NP were excluded. Selected patients were evaluated in a medical visit. Demographic, clinical and laboratorial data were collected and disease activity and functional measures were evaluated. Two validated questionnaires were applied to assess NP: the Leeds Assessment of Neuropathic Symptoms (LANSS) and the PDQ. Univariate and multivariate logistic regression were performed to identify the predictors of NP. Significance level was set as <0.05.
Results: 112 RA patients were included. 86 (77%) were females, with a mean (SD) age of 55.1 (10.8) years and median disease duration of 13 years (range: 2-41). 84% patients were seropositive for Rheumatoid Factor and/or ACPA. 102 (91%) were treated with DMARDs and 42% with a biologic DMARD, whom 8% in monotherapy. The mean (SD) DAS28 4V was 3.61 (1.01) and 12% were in remission. 45 (40%) patients had NP by the LANSS (≥12), 28% had a possible/likely NP in the PDQ (>12) and 21% were positive in the both tests. Female sex was predictive of LANSS and PDQ NP (OR: 3.44, p=0.02 and OR: 3.70; p=0.05, respectively) and disease duration was a predictor of LANSS (OR: 0.92 per year, p= 0.004). After adjusting for these variables, pain VAS, patient global activity and the tender joint count were positive predictors of NP by both tests. Swollen joint count, ESR or CRP levels were not significantly associated with NP. DAS28 CRP and HAQ scores were both significant positive predictors of PDQ NP (OR: 1.77 and OR: 3.61, p<0.01, respectively). DAS28 CRP, dichotomized as remission/non-remission, and the HAQ score were also significantly positive predictors of LANSS NP (OR: 5.55, p=0.01 (DAS28 CRP≥2.6); OR: 2.15, p=0.03). Positivity for ACPA was a significant negative predictor of LANSS NP (OR: 0.23, p=0.009), remaining significant after adjusting for DAS28 CRP, HAQ and current methotrexate (MTX). Number of analgesics and current NSAIDs treatment were associated with PDQ NP (OR: 2.72 and OR: 3.40, respectively, p<0.05). Current MTX and previous/current Hydroxychloroquine (HCQ) treatment were both negative predictors for PDQ NP (OR: 0.41 and OR: 0.20, respectively, p<0.05). No significant associations were found for other therapies or clinical features. In a group of patients with dosed TSH levels (n=18), there was a positive though non-significant association with LANSS and PDQ (OR: 3.12, OR: 13.98, p=0.09).
Conclusion: NP was present in sizable proportion of RA patients. Consistently with previous data, our study supports the association between NP and disease activity/functional scores but not with objective inflammatory measures. This study newly points to a possible protective role of ACPA positivity, MTX and HCQ treatment in NP risk. Further studies are needed to confirm this hypothesis.

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GRUPO 2

P170 – ZOLEDRONATE EFFECTIVENESS AND SAFETY IN ACTIVE PAGET'S DISEASE: LONG-TERM FOLLOW-UP AND RETREATMENT IN CLINICAL PRACTICE

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Background: Bisphosphonates are considered first line therapy in the treatment of Paget's Disease (PD). The objective of this observational study was to assess long-term effectiveness and safety of zoledronate in the treatment of Portuguese active PD patients.
Methods: Patients with active PD treated with zoledronate 5 mg were recruited and followed prospectively. Clinical parameters and bone turnover markers, calcium phosphorus and parathormone serum levels were determined before, at 3 and every 6 months after treatment. Remission was defined as normalization of

alkaline phosphatase (ALP) levels. Retreatment was considered when ALP levels increased more than 25% of the upper limit of normal or of the nadir achieved, in cases of non-normalization of ALP. Adverse events were registered. Patients were excluded from the analysis during follow-up if: 1) were retreated with zoledronate for other indication, 2) were started on oral bisphosphonates or other bone anti-resorption agents 3) missed the 3 months, or more than 24 months, laboratorial evaluations.

Results: 75 patients (63% males), with 67±10 years and a disease duration of 10±8 years were included. The majority of patients were originated from Alentejo (58,1%). 67% had polyostotic disease and the mean percentage of skeletal involvement was of 12±10%. Iliac bone, vertebra and femur were the most frequently affected bones, respectively in 65, 39 and 37% of the patients. 75% were symptomatic at presentation. 47% had been previously treated with pamidronate (cumulative dose 213±259mg). After a single infusion of zoledronate remission was achieved in 93% and 95% of patients, at 3 and 6 months post-treatment, respectively. Significant reductions of the mean levels of ALP, bone-specific ALP, procollagen type 1 N-terminal propertied (P1NP), and b-C-terminal telopeptide of type I collagen (CTX-I) were observed at 3, 6 and 12 months after treatment. The maximum therapeutic effect was obtained at 12 months with 97% of patients achieving remission. Considering symptomatic patients (bone/joint pain) 70% referred pain improvement after treatment. During a mean follow-up of 64±38 months, 10 patients (13.3%) relapsed, on average 59 months after the 1st zoledronate infusion. From these 10 retreated patients, 2 required a 3rd zoledronate infusion, at 48 and 68 months after the 2nd infusion. A total of 36 patients were lost to follow-up: 22 due to loss of clinical/laboratorial follow-up, 9 due to retreatment of zoledronate for osteoporosis and 2 due to the start of oral bisphosphonates. Zoledronate infusion with generally well tolerated: 16 patients referred flu-like symptoms, 8 and 16 showed transitory asymptomatic hypocalcaemia and hypophosphatemia, respectively; 1 reported dizziness, 1 bone pain and 2 patients myalgia.

Conclusions: This study shows the effectiveness and safety of zoledronate in a Portuguese population of patients with active PD with long term follow-up. Biochemical remission was achieved in 97% of patients at 12 months. Furthermore, the beneficial effect of zoledronate was sustained, with only 13.3% of patients requiring retreatment during an average follow-up of 64 months.

P22 – METHOTREXATE AND LOW DOSE PREDNISOLONE DOWNREGULATE OSTEOCLAST FUNCTION IN MONOCYTES FROM EARLY RHEUMATOID ARTHRITIS PATIENTS

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Rheumatoid arthritis (RA) is a systemic, immune mediated inflammatory disease that is associated with bone erosions and joint destruction. Methotrexate (MTX) slows bone damage but the mechanism by which it acts is still unknown.

In this study we aimed to assess the effect of MTX and low dose prednisolone (MTX+PDN) on circulating osteoclast (OC) precursors and OC differentiation in RA patients.

Methods: RA patients before and at least 6 months after MTX therapy were analyzed and compared with healthy donors. A blood sample was collected in order to assess receptor activator of NF- B (RANK) ligand (RANKL) surface expression on circulating leukocytes and frequency and phenotype of monocyte subpopulations. Serum quantification of bone turnover markers and cytokines and in vitro OC differentiation assays were performed.

The number or $RANKL^+$ neutrophils increased in RA patients when compared to healthy donors (p=0.006) and after treatment with MTX+PDN their count was reduced to healthy control numbers (p=0.0155). Classical activation markers of monocytes such as HLA-DR, CD86, CCR2 and CD11b, and also RANK were increased in RA patients at baseline, comparing to control healthy donors. After MTX+PDN exposure, expression decreased to healthy control levels. Serum RANKL levels were increased at baseline comparing to healthy donors (p=0.0164) and normalized after therapy. Although the number of OC was not different between groups, resorbed area and resorbed

area/pit were elevated when compared to controls (p=0.0436 and 0.0249, respectively) and reduced after treatment (p<0.0001).

Our results suggest that MTX+PDN play an important role in downregulating OC function, which we believe occurs through a decrease in RANK surface expression in monocytes

P86 – A COMPARISON STUDY OF PREVALENCE OF TRADITIONAL CARDIOVASCULAR RISK FACTORS AND FRAMINGHAM RISK SCORE IN SYSTEMIC SCLEROSIS PATIENTS AND MATCHED CONTROLS

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Background: In Systemic Sclerosis (SSc), data on prevalence of traditional cardiovascular (CV) disease risk factors is scarce and conflicting (1). Therefore, SSc patients CV risk attributed to traditional CV risk factors remains an issue of debate.

Objectives: To evaluate if patients with SSc have a higher prevalence of traditional CV disease risk factors and a higher risk of longterm CV events based on the risk prediction tool of the Framingham risk score (FRS) in comparison with age, race and sex matched control subjects.

Methods: The study comprised patients diagnosed with SSc, fulfilling both the 1980 ACR and the 2013 ACR/EULAR criteria for the disease, and followed-up at our Rheumatology Department and a group of age, race and sex-matched controls. Inclusion criteria were age 30 to 74 and no history of CV events in order to calculate FRS. In total, 46 out of 62 patients were eligible for the study. Traditional CV disease risk factors (diabetes, arterial hypertension and smoking) were compared among the 46 patients with SSc and 51 matched controls. Systolic blood pressure (SBP) values and total and high-density lipoprotein (HDL) cholesterol levels were also collected. The 10-year risk for CV events according to FRS was calculated and means of patients and controls were compared. Subjects' distribution into 3 categories of risk – low (<10% risk), medium (10--20% risk) and high (>20% risk) was also compared. Parametric and nonparametric tests were used for comparison between groups. P value <0.05 was defined as statistically significant.

Results: Mean risk for CV events in 10-years assessed by FRS was 10.00%±8.61 for SSc patients and 7.76%±8.30 for matched controls. Differences were not statistically significant (p=0.196). Additionally, prevalence of diabetes, arterial hypertension and smoking did not differ significantly between the two groups (p=0.890, p=0.443, p=0.651, respectively). Total and HDL cholesterol levels were also similar between groups (p=0.963 and p=0.506, respectively). Only SBP values (mmHg) of SSc patients were significantly higher (128.50 mmHg [113.5 to 139.3]) (median [interquartile range]) compared with controls (120.00 [110 to 130]), p=0.031. Subjects' distribution into the 3 groups of risk defined was similar for both groups (p=0.205).

Conclusions: In our study, prevalence of traditional CV disease risk factors and 10-year risk for CV events based on FRS assessment tool did not differ significantly between SSc patients and age, sex and race matched controls.

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P172 – AVALIAÇÃO DA EFICÁCIA E SEGURANÇA DA FRAGMENTAÇÃO/ /ASPIRAÇÃO ECOGUIADA DE CALCIFICAÇÃO DO OMBRO: RESULTADOS ÀS 24 SEMANAS

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Introdução: A tendinopatia calcificante do ombro está associada a depósitos de cálcio (predominantemente hidroxiapatite) ao nível da coifa dos rotadores. É responsável por 7% dos casos de omalgia, podendo ser altamente incapacitante. O tendão do supraespinhoso é o mais afectado (80% dos casos). A sua etiologia ainda é desconhecida, apesar de existirem diversas teorias. Esta patologia divide-se em 4 fases: fase de pré-calcificação, fase de calcificação (que se divide em formativa e reabsortiva) e fase de pós-calcificação. A fase reabsortiva é a mais dolorosa.

Por se tratar de um processo auto-limitado, o tratamento da tendinopatia calcificante do ombro deve, para além de eficaz, ser o menos invasivo possível e livre de complicações major. Existem uma série de tratamentos que podem ser utilizados nas fases de maior exacerbação álgica, no entanto ainda não há um consenso quanto ao que se mostrou mais útil.

O objectivo deste estudo foi avaliar a eficácia e segurança da fragmentação/aspiração ecoguiada da calcificação do supraespinhoso, às 24 semanas.

Material e Métodos: Estudo prospectivo onde foram avaliados 42 doentes, com omalgia associada a tendinopatia calcificante do supraespinhoso e refratária a tratamento conservador. Após confirmação ecográfica da calcficação este doentes foram submetidos a fragmentação/aspiração ecoguiada da calcificação.

Foram aplicados o Questionário QuickDASH, Escala Numérica da Dor (END) e Índice de Dor e Incapacidade no Ombro (SPADI), previamente à realização do procedimento (na baseline) e após 4 semanas e 24 semanas. Foram registados os efeitos adversos.

Resultados: 42 pacientes (31;11) com uma idade média de 49,8 anos foram incluídos no estudo. Os valores médios da END à baseline e após 4 e 24 semanas foram 7,5, 4,3 e 1,7, respectivamente. Os valores médios do Questionário QuickDASH à baseline e após 4 e 24 semanas foram 64,6, 26,0 e 14,1, respectivamente. Os valores médios do SPADI à baseline e após 4 e 24 semanas foram 62,3, 29,8 e 19,7, respectivamente. Em 3 casos os doentes não apresentaram qualquer melhoria após a realização do procedimento, tendo sido orientados para a realização de outro tipo de tratamentos. Os únicos efeitos adversos registados foram desconforto no local das picadas (35,7%) e ligeira reacção vagal após a realização do procedimento (4,8%).

Discussão e Conclusão: A fragmentação/aspiração ecoguiada de calcificação do ombro parece ser uma técnica segura e eficaz para alívio sintomático e melhoria funcional, quando os tratamentos mais conservadores se mostram ineficazes ou pouco eficazes. Nos casos em que esta técnica se mostra ineficaz, os doentes ser encaminhados para outros tipos de tratamentos.

P153 – EFFECTIVENESS AND PERSISTENCE OF THE FIRST TUMOR NECROSIS FACTOR INHIBITOR IN PORTUGUESE PSORIATIC ARTHRITIS PATIENTS.

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Background: Tumor necrosis factor inhibitors (TNFi) lead to a dramatic improvement in the management of Psoriatic Arthritis (PsA).Despite their effectiveness, there is still a significant proportion of patients that do not respond and/or are intolerant to TNFis. The objective of this work was to assess the effectiveness, measured by response rates and drug survival, within a period of 4 years of the first TNFi treatment, and the main reasons for discontinuation of the first TNFi, in patients with PsA.

Methodology: This was a retrospective non-interventional study of adult PsA patients registered at the Rheumatic Diseases Portuguese Registry (Reuma.pt), with at least 1 TNFi prescription. Data was analyzed at 0, 3, 6, 12, 24, 36 and 48 months after starting a first TNFi. For qualitative data, absolute and relative frequencies are presented. Percentages are based on the total number of subjects with non-missing values unless specified otherwise. In case of quantitative data: mean and standard deviation are presented. Response to TNFi was measured by composite disease activity (DAS, ACR, PsARC, BASDAI, ASDAS, MDA) and functional indices (HAQ). Drug survival was assessed by Kaplan-Meier survival analysis. In all analyses signifi-

TABLE 1. RESPONSE RATES THROUGH FOLLOW-UP

	3 months	6 months	12 months	24 months	36 months	42 months
ACR20	61 (81.14%)	70 (90.91%)	61 (96.83%)	48 (97.96%)	27 (91.67%)	22 (91.67%)
ACR50	47 (67.14%)	52 (67.53%)	48 (76.19%)	39 (79.59%)	23 (79.31%)	19 (79.17%)
ACR70	24 (34.29%)	30 (38.96%)	33 (52.38%)	27 (55.10%)	19 (65.52%)	14 (58.33%)
Good EULAR response (DAS28)	96 (47.52%)	116 (57.14%)	101 (54.30%)	88 (65.67%)	53 (58.59%)	52 (64.20%)
PsARC response	144 (77.01%)	158 (77.45%)	143 (81.71%)	103 (83.06%)	77 (88.51%)	57 (81.43%)
ΔHAQ-DI	-0.49±0.54	-0.36±0.52	-0.45±0.67	-0.51±0.54	-0.59±0.54	-0.58±0.64
MDA	6 (4.65%)	15 (13.27%)	16 (15.53%)	13 (18.84%)	10 (17.86%)	8 (21.62%)
ASDAS (ΔASDAS≥1.1)	64 (62.14%)	72 (65.45%)	57 (64.04%)	42 (64.62%)	36 (69.23%)	33 (73.33%)
(ΔBASDAI≥50% or ΔBASDAI>2)	66 (57.39%)	68 (57.63%)	60 (62.50%)	44 (61.11%)	38 (66.67%)	34 (68.00%)

Note: sample size is not constant due to available evaluations.
Good EULAR response (DAS28)– 3 months (n=202); 6 months (n=203); 12 months (n=186); 24 months (n=134); 36 months (n=90); 48 months (n=81).
PsARCresponse – 3 months (n=187); 6 months (n=204); 12 months (n=175); 24 months (n=124); 36 months (n=87); 48 months (n=70).
ΔHAQ-DI – 3 months (n=149); 6 months (n=160); 12 months (n=141); 24 months (n=101); 36 months (n=67); 48 months (n=56).
MDA – 3 months (n=129); 6 months (n=113); 12 months (n=103); 24 months (n=69); 36 months (n=56); 48 months (n=37).
ASDAS (ΔASDAS≥1.1) – 3 months (n=103); 6 months (n=110); 12 months (n=89); 24 months (n=65); 36 months (n=52); 48 months (n=45).
(ΔBASDAI≥50% or ΔBASDAI>2) – 3 months (n=115); 6 months (n=118); 12 months (n=96); 24 months (n=72); 36 months (n=57); 48 months (n=50).

cance level was set at 0.05.

Results: A total of 705 PsA patients were included, with a mean age of 52.5 years (±13.3); 50.8% (n=358) female. The mean age at first symptoms was 37.0±12.7 and at PsA diagnosis of 40.6±12.5 years. The most common subtype of PsA was symmetric polyarthritis (n=385; 61.5%). The mean time from diagnosis to 1st csDMARD was 3.3±6.0 and to 1st bDMARD was 6.6±6.9 years. 185 patients (26.24%) were treated with adalimumab, 322 (45.67%) etanercept, 100 (14.18%) golimumab and 98 (13.90%) with infliximab as first TNFi. The average response rates, as measured by composite disease activity and functional indices, are shown in Table 1. The average drug persistence was of 31.79±17.03 months for TNFi as a group, with 205 (29.08%) of discontinuations during a period of 4 years of follow-up. The main reasons for discontinuation of the first TNFi were: non response/loss of response 111 (54.15%), adverse event 48 (23.41%), surgery 6 (2.93%), treatment refusal to continue treatment, 4 (1.95%), loss to follow-up 3 (1.46%), attempted pregnancy/pregnancy 4 (1.95%), death 2 (0.98%), remission 2 (0.98%), and others 10 (4.88%).

Conclusions: PsA patients receiving a first TNFi will persist on treatment for an average of 2.6 years with treatment discontinuations rates of 29.08%. Non response/loss of response constitutes the major reason for treatment discontinuation in this population.

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P174 – CROSS-CULTURAL VALIDATION OF THE EULAR "RHEUMATOID ARTHRITIS IMPACT OF DISEASE" SCORE INTO PORTUGUESE: A CROSS-SECTIONAL STUDY OF 288 RA PATIENTS USING RASCH ANALYSIS

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Background: The Rheumatoid Arthritis Impact of Disease (RAID) score[1] assesses 7 impact domains of interest for people with rheumatoid arthritis (RA). Its use in research and clinical practice has been growing, and it is already translated into over 70 languages[2] but the cross-cultural validity of the Portuguese RAID has not been well established.

Objectives: To validate the Portuguese RAID for use in Portugal.

Methods: This was a single centre, cross-sectional validation study involving 2 phases: (i) cognitive debriefing with 38 patients to determine comprehension

TABLE 1. RESULTS OF RASCH ANALYSIS FROM POOLED DATA

Country	N	RAID (n items)	Fit Residual Mean (SD)		Chi² Interaction		Person Separation Index
			Item	Person	Value (DF)	p-value	
Portugal	288	7	-0.13 (2.53)	-0.67 (1.60)	40.50 (35)	0.24	.94
UK	205	7	0.22 (1.72)	-0.44 (1.37)	40.50 (35)	0.17	.93
France	195	7	0.19 (1.99)	-0.71 (1.57)	25.69 (21)	0.22	.91
Pooled	688	7	-0.06 (3.48)	-0.65 (1.55)	94.88 (63)	0.01	.93
		6*	-0.34 (3.88)	-0.63 (1.44)	66.04 (54)	0.13	.93
Expected values for perfect fit			0 (1)	0 (1)		>0.05	>.85

DF, degrees of freedom; *6 items for cross-cultural comparisons (items 2 "Function" and 5 "Physical well-being" combined).

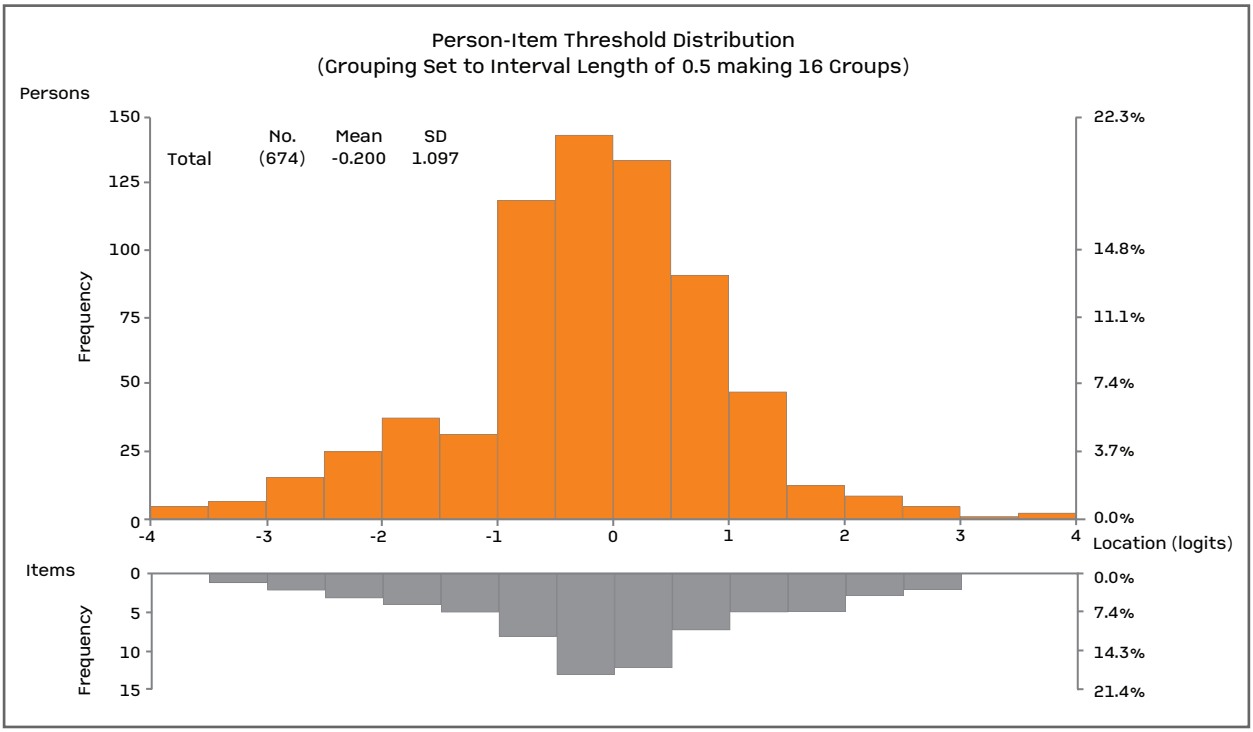

FIGURE 1. Distribution of items and persons along the same scale (logit score) confirming good targeting of the RAID. The x-axis is the logit score and represents the interval scaling of the items according to the Rasch model, with -4 being no impact and 4 being high impact of disease

of the existing[2] Portuguese RAID (ii) cross-cultural validation using data from adult patients who were willing and able to complete the Portuguese RAID unaided. Analyses included fit to the Rasch model (implying construct validity, reliability and statistical sufficiency), tests for unidimensionality and invariance across different patient subgroups i.e. age, gender, education background, disease duration, function and culture. To test invariance to culture, the Portugal dataset was compared with datasets from France (n=195) and the UK (n=205).[3] RUMM2030 software was used in all analyses.

Results: Phase I led to minor changes in phrasing 3 items to enhance understanding and conceptual equivalence between the original RAID and the Portuguese version. In Phase II, 288 patients were included: mean (SD) age=60 (12) years, 82% females, 76% with disease duration ≥5 years, 30% on biologics. The Portuguese RAID was shown to have adequate fit to the Rasch model and high internal consistency (Table 1). Unidimensionality and invariance to age, gender, disease duration and function were confirmed (data not shown). The scale was well targeted for patients with different levels of disease impact (Figure 1). Pooling the datasets from Portugal, France and the UK revealed no cultural response bias (Table 1). RAID was then calibrated into logit-based scores to enable parametric analyses and bias-free cross-cultural comparisons if desired (data not shown).

Conclusions: This study confirms the Portuguese RAID as a robust unidimensional tool for use in Portugal. The raw scores of the 7-item RAID can be used with confidence in clinical practice. Conversion charts are available to enable accurate cross-cultural comparisons across Portugal, France and the UK.

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P182 – APLICAÇÃO ECOGUIADA DE PLASMA RICO EM PLAQUETAS – UMA SOLUÇÃO NA ABORDAGEM TERAPÊUTICA DA TENDINOPATIA INSERCIONAL CRÓNICA DO TENDÃO DE AQUILES?

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Introdução: O Tendão de Aquiles é o maior e mais forte tendão do corpo humano, sendo suscetível a traumatismos repetidos. A tendinopatia insercional crónica do Tendão de Aquiles (TA) é uma lesão de etiologia multifatorial, que ocorre predominantemente no género masculino e em idades compreendidas entre os 30 e 50 anos. É frequentemente causa de dor e rigidez na região peritendinosa, condicionando incapacidade funcional.

Acredita-se que esteja relacionada com o enfraquecimento progressivo do tendão por lesões de sobreuso, associadas à prática regular de exercício físico. A nível histológico, demonstram-se alterações degenerativas do tendão.

A abordagem terapêutica inicial passa por um período de fisioterapia, associada a repouso e analgesia. No entanto, não raramente, a sintomatologia não é resolvida após o tratamento conservador.

A aplicação de plasma rico em plaquetas (PRP) surge como uma estratégia alternativa no tratamento das tendinopatias. Consiste em sangue autólogo com elevada concentração de plaquetas e fatores de crescimento, que recrutam células com capacidade regeneradora dos tecidos. A ecografia coadjuvante permite uma visualização real das estruturas e a colocação precisa da agulha no local pretendido.

O objetivo deste trabalho passa pela avaliação da eficácia e segurança da infiltração de PRP no tratamento da Tendinopatia Insercional crónica do Tendão de Aquiles.

Material e Métodos: Estudo retrospetivo e descritivo de 6 doentes com diagnóstico de Tendinopatia Insercional crónica do Tendão de Aquiles, em que se administraram, com o apoio de ecografia, 4ml de PRP. Foram avaliados os resultados através de 2 questionários, Western Ontario & McMaster Osteoarthritis Index (WOMAC) e SF-36 (Questionário do Estado de Saúde) e foi aplicada a Escala Numérica da Dor (END). Através de contacto telefónico, cada paciente respondeu duas vezes a cada questionário, um referente ao período pré-intervenção e outro relativo a uma período de 6 semanas após a intervenção. Aferiu-se ainda o grau de satisfação geral após o procedimento (pontuando de 0 a 10) e registaram-se os efeitos adversos.

Resultados: Foram avaliados 6 doentes do género masculino e idade média de 41,3 anos, com o diagnóstico de Tendinopatia Insercional crónica do Tendão de

Aquiles refratária a tratamento conservador.

Comparando o períodos pré-intervenção com a avaliação após 6 semanas de procedimento, objetivou-se uma melhoria média na escala WOMAC de 28,73 pontos.

No que toca à escala SF-36, os resultados demonstraram uma melhoria de 36,05 pontos nos parâmetros de função física e de 40,73 pontos na dor após a intervenção. Quanto à Escala Numérica da Dor, constatou-se uma melhoria média de 6,5 pontos.

No que toca ao grau de satisfação relacionado com a técnica interventiva, três doentes pontuaram 8 e três pontuaram 9 pontos. Registou-se ainda o aparecimento de dor e hematoma no local da punção em 2 doentes, tendo revertido espontaneamente após 15 dias.

Conclusão: A infiltração ecoguiada de PRP parece ser uma uma opção terapêutica eficaz na Tendinopatia Insercional crónica do Tendão de Aquiles, atuando como um estímulo regenerativo para a cicatrização tendinosa. Dada a sua natureza autóloga, demonstra também ser uma terapêutica segura, sem efeitos adversos importantes, podendo ser considerada quando a terapêutica conservadora não é eficaz.

Mais estudos científicos deverão ser realizados para aferir o nível de evidência da utilização de PRP nesta patologia, seja de forma isolada ou como otimizador do tratamento conservador.

P38 – ULTRASOUND-GUIDED SYNOVIAL NEEDLE BIOPSY: UPDATE OF EXPERIENCE WITH AN EMERGING, MINIMALLY INVASIVE TECHNIQUE IN CLINICAL PRACTICE AND RESEARCH

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Background: Synovial biopsy remains an important tool in clinical practice and research for the study of synovitis. Ultrasound-guided needle biopsy (USNB), as described by Kelly et al [1], has recently emerged as a minimally invasive technique, which enables collection of high quality synovial tissue with very good patient tolerance.

Objectives: To update the experience with USNB in our department, since the first report in 2016.

Methods: We reviewed the clinical files of all patients who had an USNB in our department. Degree of US joint synovitis was evaluated on a semi-quantitative scale (0-3) in terms of synovial thickness (ST) and power Doppler (PD). Since 2015, we assessed patient tolerance and acceptance of the procedure using a standardized questionnaire, which includes visual analogue scales (VAS) of pain, stiffness and swelling of the biopsied joint. Changes in US and VAS scores were assessed using the Wilcoxon signed-rank test.

Results: Forty-eight patients had 53 USNB, mostly for diagnostic purposes (79%), performed by 4 different operators - Table 1. All types of joints were biopsied, mostly medium sized (26 wrists, 7 ankles), but also large (3 knees, 4 shoulders, 6 elbows, 3 hips) and small (1 sternoclavicular, 1 naviculocuneiform, 1 metacarpophalangeal and 1 proximal interphalangeal) joints, 2 bursae (subacromial) and 1 tendon sheath (1st extensor compartment of the wrist). USNB was repeated in the same joint (wrist) twice in 3 patients and three times in one patient. Procedures were well tolerated, with 67% of patients classifying it as easy or very easy, 78% reporting no or only mild discomfort and 77% considering likely/very likely to accept to repeat the biopsy. An increase in analgesic medication in the days following the biopsy was reported by 13 out of 44 questioned patients. After a median of 8 days following the procedure, a significant decrease was observed in VAS scores of pain, stiffness and swelling of the biopsied joint, although 23%, 23% and 31% of the patients, respectively reported small increases in these scores (median 9.5, 11 and 10mm, respectively). There was no significant change in US scores pre- and post-biopsy, with only 3 and 2 patients having an increase in ST or PD scores, respectively. Biopsies were overall safe, with 6 minor immediate adverse events (11%). There were no cases of haemartrosis, joint/periarticular infection or neurovascular damage. Two patients reported transient limitation of the 5th and 1st digit extension following a biopsy of the wrist and 1st extensor compartment tendon sheath, respectively, with no detectable tendinous ruptures on US; 1 patient had a muscular hematoma of the extensor muscles of the forearm following an elbow biopsy.

Conclusions: In our center, USNB has proved to be an effective technique for collection of synovial membrane

TABLE 1. PATIENT & BIOPSY CHARACTERISTICS (N=53)

Age/Female	56 ± 18 years / 34 (64%)		
Diagnosis	21 RA, 13 UA, 8 septic, 5 crystal, 3 PsA, 1SpA, 2 other		
Disease duration	5.3 ± 7.1 years		
DAS28	4.3±1.2		
Clinical indication	42 diagnostic (79%), 11 research (21%)		
Joint size	16 large, 30 medium, 4 small, 2 bursa, 1 tendon sheath		
Immediate tolerance	29% very easy, 38% easy, 24% tolerable, 9% difficult		
Discomfort during procedure	36% no disc., 42% mild disc., 11% moderate disc., 5.5% mild pain, 5.5% intense pain		
Increase pain medication	13 (30%) in days following procedure		
Likelihood to repeat biopsy	41% very likely, 36% likely, 9% maybe, 14% unlikely		
Immediate AE	5 minor local bleeding, 1 transitory forearm extensor paralysis due to anesthesia		
Other AE	2 transient digit extension limitation (D5, D1), 1 muscular hematoma forearm		
	Pre-biopsy	**Post-biopsy**	**p-value**
VAS pain biopsied joint (mm)	62±25	46±29	0.001*
VAS stiffness biopsied joint (mm)	59±30	37±31	0.004*
VAS swelling biopsied joint (mm)	61±26	44±28	0.007*
US synovial thickness score	2.5±0.6	2.2±0.8	0.092
US Power Doppler score	1.0±1.2	1.0±1.1	0.414

*p-value significant at <0.05. AE, adverse events; D1, digit 1; D5, digit 5; DAS28, disease activity score 28 joints; disc., discomfort; PsA, psoriatic arthritis; RA, rheumatoid arthritis; SpA, spondyloarthritis; UA, undifferentiated arthritis; US, ultrasound; VAS, visual analogue scale

that can be used for diagnostic and research purposes. The vast majority of the procedures were well tolerated, without significant worsening of local joint symptoms or synovitis, and safe, without major adverse events. Importantly, patients' concordance to repeat a USNB was high.

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GRUPO 3

P28 – PULMONARY EMBOLISM IN SYSTEMIC SCLEROSIS – ONE YEAR FOLLOW UP

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Introduction: The risk of pulmonary embolism (PE) in systemic sclerosis (SSc), has been estimated between 2.51-3.47 fold higher when compared to non-SSc patients. Proinflammatory state, vasculopathy and vascular injury may contribute to a prothrombotic state in these patients and an increased risk for venous thromboembolism.

Objectives: Calculate the frequency and identify possible risk factors for PE among SSc patients; analyse the efficacy of long-term anticoagulation in these patients.

Methods: We conducted a retrospective analysis of 110 patients with SSc followed in our Rheumatology department and selected those who were submitted to lung ventilation/perfusion scintigraphy (V/Q scan) or CT pulmonary angiography due to worsening dyspnea/fatigue or isolated reduction of the carbon monoxide diffusing capacity (DLCO). We collected demo-

graphic features, comorbidities, age at SSc diagnosis, anti-nuclear antibody specificities, dyspnea according to New York Heart Association (NYHA) classes and results of cardio-pulmonary exams. PE and related variables were assessed at baseline and after 12 months of anticoagulation.

Results: PE was diagnosed in 12 out of 29 (41.4%) SSc patients that met the inclusion criteria, with the majority presenting bilateral peripheral multisegmental defects. Most were females (91.7%), with a mean age of 59.4 (±12.7) years. Two thirds were diagnosed with limited SSc with mean disease duration of 13.3 (±12.9) years.

The mean time between SSc diagnosis and PE diagnosis was 8.5±8.2 years, although one third of the patients was diagnosed within the first year of SSc diagnosis. One patient was taking oral contraceptives and none had thrombophilia, previous surgery or cancer.

Regarding NYHA classes, 33.3% were classified as having class≥3, with a mean N-terminal pro-brain natriuretic peptide (NTproBNP) of 1108pg/mL (19 to 8069). Six patients had concomitant interstitial lung disease (ILD) and 8 had an estimated pulmonary artery systolic pressure (PASP) ≥35 mmHg (6 of them had concomitant ILD). From these only 2 had pulmonary hypertension confirmed by right heart catheterization and 1 eventually died.

When comparing SSc patients with and without PE, Scl70 positivity was more common in patients with PE (p=0.041). No significant associations were found between PE diagnosis and presence of hypertension, diabetes, smoking, obesity and dyslipidemia.

From the 12 patients with PE, 10 were on long-term anticoagulation: 5 are anticoagulated with rivaroxaban, 4 with warfarin and 1 with apixaban. Data from clinical reassessment after 12 months of anticoagulation are shown in table 1.

Conclusions: Our results suggest that PE is frequent in SSc and must be considered in the differential diagnosis of worsening fatigue and dyspnea and/or reduction of DLCO/PASP increase. PE may occur early in disease course and more frequently in Scl70 positive patients. A possible explanation for this fact is that vasculopathy and vascular injury seem to be more prominent in the early phase of the disease. Although there is no consensus regarding the optimal anticoagulant therapy, the disease's vasculopathy seems to be an important contributor potentially preventing im-

TABLE 1. PATIENTS' REASSESSMENT AFTER 12 MONTHS OF ACO

Patient	Anticoagulant	Symptoms*	NT-pro BNP	V/Q scan	PASP (mmHg)	DLCO
1	Warfarin	Discrete improvement	Reduction (>100 pg/mL)	Not available	Not available	Identic
2	Rivaroxaban	Identic	Identic	Identic	Identic	Identic
3	Non-pplicable§					
4	Rivaroxaban	anticoagulated for < 6 months				
5	Warfarin	Identic	Identic	Identic	Identic	Discrete improvement (29»36)
6	Apixaban	Discrete improvement	Discrete raise (±100 pg/mL)	Decrease in perfusion defects	Worsening (28»40)¤	Identic
7	Warfarin	Discrete improvement	Identic	Identic	Improvement (51»30)	Not available
8	Warfarin	Identic	Marked raise (>5000 pg/mL)¥	Not available	Not available	Not available
9	Non-pplicable§					
10	Rivaroxaban	Identic	Raise (±200 pg/mL)	Identic	Not available	Identic
11	Rivaroxaban	Discrete improvement	Identic	Identic	Not available	Not available
12	Rivaroxaban	anticoagulated for < 6 months				

*Symptoms evaluated were fatigue and dyspnea; § V/Q scan defects are too subtle and the risk is considered to outweigh the benefit of anticoagulation; ¤ Cardiac catheterization demonstrated important coronary disease; ¥ In relation with worsening of ILD

provement in perfusion defects, regardless of the anticoagulant used.

P140 – THE PHYSICIAN GLOBAL ASSESSMENT CRITERION IN SLE RESPONDER INDEX DOES NOT PRESENT ADDED VALUE TO DEFINE RESPONDERS: A PROSPECTIVE COHORT STUDY

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Background: Measuring SLE disease activity accurately remains a challenging task given the complex multi-system nature of lupus and its variability between patients and within the same patient over time. The SLE Responder Index (SRI) is a primary efficacy outcome in SLE clinical trials. It defines a responder as a patient whose disease course fulfils a ≥4-point reduction in Systemic Lupus Erythematosus Disease Activity Index (SLEDAI), no new British Isles Lupus Assessment Group (BILAG) A or not more than one new BILAG B organ domain score, and no worsening from baseline in the Physician Global Assessment (PGA) ≥0.3 points. The main driver of the SRI is the 4-point or greater reduction in the SLEDAI score and the role of PGA in SRI seems to be limited.
Aim: To evaluate the value of PGA in case definition of responders in SLE responder index.
Methods: Prospective cohort study of SLE patients followed at a tertiary care lupus clinic from January 2014 to December 2016. Consecutive patients fulfilling the ACR'97 and/or the SLICC'12 classification criteria with SLEDAI 2K≥4 were included. At each outpatient visit, disease activity from the last 30 days was scored in the Physician Global Assessment (PGA) (0-3 cm scale) and SLEDAI 2K. In patients with an improvement defined with the SRI criterion (ΔSLEDAI 2K≤ -4 from baseline) we quantified the proportion of cases excluded as responders according to the PGA criterion in SRI.
Results: We included 161 patients (87.6% female, mean age at baseline 42.4±1.04 years). At baseline, median PGA and SLEDAI 2K score was 0.4 points (range 0.1-2.5) and 4 points (range 4-19), respectively. During follow-up, eighty-five patients (60.3%) had a reduction of SLEDAI 2K≥ 4 points (range 4-13), and with a median reduction of PGA of 0.4 points (range 0.0-2.0). Of these patients, none had an increase in PGA.
Conclusion: The PGA criterion in SRI did not present added value to define responders, suggesting that the SRI could be simplified to just SLEDAI and BILAG criteria.

P211 – CARATERÍSTICAS CLÍNICAS E IMUNOLÓGICAS DA SÍNDROME DE SJÖGREN PRECOCE

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Introdução: A Síndrome de Sjögren primária é habitualmente insidiosa, sendo as queixas secas iniciais desvalorizadas e alongando o período de tempo até ao diagnóstico (Dt). Nos casos com envolvimento sistémico precoce, as queixas secas são frequentemente escassas, dificultando o diagnóstico. Deste modo, é escasso o conhecimento dos processos imunológicos iniciais da doença.
Objetivos: Pretente-se avaliar as caraterísticas clínicas e laboratoriais, incluindo parâmetros imunológicos, de uma população com SSP de diagnóstico recente.
Métodos: Foram incluídos 32 doentes com SSP diagnosticado há menos de 2 anos (critérios do AECG) e 22 controlos saudáveis. Recolheram-se dados demográficos, clínicos e laboratoriais, e realizou-se sialometria, teste de Schirmer I, teste de quebra lacrimal (BUT) e avaliação de queratite. Caraterizaram-se por citometria de fluxo as subpopulações linfocitárias circulantes: células T foliculares (Tfh) e reguladoras (Treg), estados maturativos das células B, plasmablastos (PB) e células B reguladoras (Breg). A análise estatística foi realizada com GraphPad, sendo a significância p<0,05.
Resultados: A idade estimada de início foi de 49,1 anos, sendo consideradas manifestações iniciais: queixas secas (81,3%), artralgias/artrite (9,4%), exantema (3,1%) e leucopenia (6,3%). Anticorpos anti-SSA esta-

QUADRO I. CARATERÍSTICAS CLÍNICAS E IMUNOLÓGICAS DA SÍNDROME DE SJÖGREN PRECOCE

	SSA +	SSA -	Total
N	17	15	32
Idade (média)	50,6	60,5	55,2
Idade de início	45,2	53,5	49,1
Tempo até diagnóstico	4,4	5,8	5,1
Xerostomia	88,2%	100%	93,8%
Xeroftalmia	88,2%	93,3%	90,6%
Sialometria NE (ml/min)	0,165	0,161	0,164
Sialometria EM (ml/min)	0,998	0,874	0,959
Schirmer (mm)	7,7	6,0	6,9
BUT diminuído	64,7%	46,7%	56,3%
Queratite seca	17,6%	33,3%	25%
SSB	53,8%	0%	26,9%
ANA ≥ 1/320	76,5%	66,7%	71,9%
ANA ≥ 1/160	88,2%	80%	84,4%
FR	50%	15,4%	33,3%
ESSDAI médio (min-máx)	1,8 (0-7)	0,9 (0-3)	1,4 (0-7)
Gamaglobulina ≥ 1,6g/dl	35,3%	6,7%	21,9%
Artralgias	29,4%	26,7%	28,1%
Artrite	11,8%	0%	6,3%
Fenómeno de Raynaud	5,9%	0%	3,1%
Alterações Sangue	47,1%	26,7%	37,5%
Pele	35,3%	26,7%	31,3%
Outras	11,8%	0%	6,3%

vam presentes em 17 doentes (53,1%). Os doentes SSA+ eram mais novos (p=0.0395) e tiveram menor Dt (p=0,0298) em relação aos doentes SSA – (Quadro 1). Doentes SSA+ tinham menor frequência de queratite (p=0,0226), mas maior percentagem de redução do BUT (p=0,0027), apresentando também mais manifestações extra-glandulares.

Em relação aos controlos, os doentes SSP apresentaram contagens absolutas mais baixas de linfócitos (p=0,0059), linfócitos T (p=0,0078) e linfócitos T CD4 (p=0,0014). Apresentaram ainda menor % de linfócitos T CD4 (p=0.0025), maior % de linfócitos T CD8 (p=0,0024) e diminuição dos valores absolutos de células Tregs (p=0,0094), T CD4 CD25+ ativadas (p=0,0058), Th17 (p=0,0017) e Tfh CXCR5+ (p=0,0002). Dentro das últimas, as células Tfh1 evidenciaram valores mais elevados no grupo SSP (0,0327). No compartimento B, os doentes evidenciaram diminuição dos valores absolutos de células memória (p≤0,0419), bem como % mais baixas de células Bm1 (p=0,0420) e Bregs CD24hiCD27+ (p=0,0108).

Nos doentes SSA+ identificaram-se % mais elevadas de células Treg (p=0,0191 *vs* SSA-; p=0,0070 *vs* Controlos), mas menores contagens face aos controlos. Nestes doentes também se identificaram contagens mais baixas de células Tfh CXCR5+ (p=0,0233 *vs* SSA-; p<0,0001 *vs* controlos), com a subpopulação Tfh17 diminuída em comparação com o grupo SSA- (p=0,0260). Observaram-se ainda % mais baixas de células Bm1 nos doentes SSA+ em relação a SSA- (p=0,0260) e a controlos (p=0,0079). As contagens absolutas de células B de memória e Bregs apresentaram valores mais baixos nos doentes SSA+ quando comparados com os controlos.

Discussão e Conclusões: O perfil imunológico da SSP apresenta caraterísticas distintas, com diminuição dos linfócitos B de memória, incluindo as células Bregs CD24hiCD27+; diminuição de várias populações de células T, mas aumento das Tfh1. Ainda que a pequena dimensão da amostra possa limitar as nossas conclusões, nos doentes com componente humoral autoimune (SSA+) parecem existir alterações mais pronun-

ciadas no compartimento B de memória, bem como nas células Tfh, importantes reguladores da diferenciação B. Para melhor compreensão da dinâmica imune na SSP, será importante avaliar estas populações ao longo da história da doença.

P55 – PREVALENCE OF RHEUMATIC DISEASES IN A POPULATION OF ANTIDFS70 POSITIVE PATIENTS

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Introduction: Antinuclear antibodies (ANA) are useful in the identification of rheumatic autoimmune diseases (RAD) such as systemic lupus erythematosus and systemic sclerosis. While some have diagnostic significance, antibodies to the dense fine speckled 70kD antigen (antiDFS70) are more common in healthy individuals and non-rheumatic diseases (such as atopic dermatitis); when associated to RAD, other specific autoantibodies (AAb) are typically present.
Objectives: To assess the prevalence of RAD in patients with positivity to antiDFS70.
Methods: From 3636 ANA screens by indirect immunofluorescence (IIF) performed during one year at a public health institution, 101 suggested antiDFS70 presence (dense-fine-speckled pattern). After confirmation with an immunoblot assay, a population of 41 positive patients was cross-sectionally evaluated. Data on demographic and clinical characteristics was collected, with special consideration to rheumatic diagnoses and positivity for other AAb.
Results: Forty-one individuals, 61.0% female (N=25), with a median age of 33 years (ranging from 8 to 84 years old) were included. Twelve were under 18 years old. Nine patients (22.0%) had a RAD. From these, only 3 had more specific Aab, with the following diagnoses: SLE (N=1), rheumatoid arthritis (RA) (N=1) and mixed connective tissue disease (MCTD) (N=1). Other 3, although only antiDFS70 positive, presented entities not necessarily associated with AAb: reactive arthritis (N=1), juvenile idiopathic arthritis (N=1) and seronegative spondyloarthritis (N=1). Three cases without any other AAb were identified: systemic sclerosis (N=1), RA (N=1) and undifferentiated connective tissue disease (UCTD) (N=1). Other diseases with possible but unconfirmed correlation to antiDFS70 were found, the most common being asthma (N=4), rhinitis (N=3) and autoimmune thyroiditis (N=3). The most prevalent diagnosis with autoimmune/auto-inflammatory background was type 1 diabetes mellitus (N=5). Considering IIF titration, nearly half (48.8%; N=20) the patients had a value equal or superior to 1/320, highlighting the tendency of antiDFS70 to be present in medium to high titers.
Conclusions: Three patients out of 9 (33.3%) contradict the trend to interpret isolated antiDFS70 positivity as a RAD exclusion criteria. However, one must consider the small sample size and the heterogeneity of available results between patients. ANA are reliable biomarkers for RAD, even included in some classification criteria. In IIF, fine-dense-speckled staining (typical of antiDFS70) can be misread as other patterns, or even overlap, leading to erroneous interpretations. Also of note, it is frequently found in medium to high titers, as in this report. Considering this, IIF testing without antiDFS70 screening and outside proper clinical suspicion detects individuals with no consistent evidence of RAD.

P65 – ANTI-MÜLLERIAN HORMONE AND OVARIAN RESERVE IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Systemic Lupus Erythematosus (SLE) is a chronic immune-mediated inflammatory disease that affects predominantly females during childbearing age. Fertility in SLE patients is considered to be normal but several known factors such as disease activity, renal involvement and treatment with cyclophosphamide (CYC) may negatively influence fertility. Immune mechanisms are also thought to be an important cause

of premature ovarian senescence, characterized by reduced ovarian reserve markers such as anti-Müllerian hormone (AMH).
Objective: To evaluate the ovarian reserve of women of reproductive age with SLE, by measuring AMH levels, and to compare it to that of non-SLE women. To analyze the association of SLE disease characteristics (renal involvement, immunological profile, SLE activity and damage indexes) with AMH levels.
Methods: 52 women with SLE between the age of 18 and 44, classified according to the 1997 ACR criteria and 20 non-SLE women were included. Serum concentrations of AMH were measured using a human AMH ELISA kit (AMH Gen II ELISA, Beckman Coulter Inc., Brea, CA USA). Demographic, clinical and obstetric data were obtained for participants with SLE. Low ovarian reserve was considered according to cut-off values provided by the manufacturer. The differences in proportions of low ovarian reserve between SLE and non-SLE women were tested by the Fisher Exact Test and the association of AMH levels with SLE disease was examined by ANOVA, stratified by age. The association of SLE characteristics with AMH levels was examined with generalized linear univariate and multivariate models.
Results: The mean age of SLE patients was 33 ± 7 years and the mean disease duration was 104 ±63 months. We found that average AMH values in the SLE group were significantly lower than in the non-SLE control group after adjusting for age (median 0.7 *vs* 2,7 ng/ml, p <0.0001). While 38,5% of SLE women had AMH age-specific levels indicative of low ovarian reserve, none non-SLE women had such criteria (p <0.001). In SLE women, lower AMH levels were statistically associated with age (even adjusted for disease length), disease length (but not independent of age), and SLICC damage index (adjusted to age). No associations were found between AMH levels and current smoking or body mass index. There was also no association between low ovarian reserve and renal involvement, disease activity (SLEDAI), presence of antiphospholipid antibodies and ds-DNA or complement levels.
Conclusions: AMH levels are decreased in SLE women, accounting for a high proportion of women with criteria for low ovarian reserve. Age and SLE damage were associated with abnormally lower AMH levels in SLE patients. This could be a sign that SLE itself may have a negative influence on the ovarian reserve. Studies with a higher sample size of SLE patients are needed to better examine the role of immunologic and therapy aspects on the levels of AMH.

P128 – LAVADO ARTICULAR DO JOELHO – UMA ALTERNATIVA TERAPÊUTICA PARA A GONARTROSE E DOENÇA POR DEPOSIÇÃO DE CRISTAIS DE PIROFOSFATO DE CÁLCIO

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Introdução: O lavado articular do joelho é uma técnica utilizada há várias décadas pelos Reumatologistas, e apresenta-se como uma alternativa terapêutica segura e eficaz para o tratamento da gonartrose e doença por deposição dos cristais de pirofosfato de cálcio (DDPC) com atingimento do joelho, principalmente em doentes com contraindicação cirúrgica. São no entanto escassas as referências a esta técnica na literatura.
Objetivos: Avaliar a eficácia, segurança e tolerabilidade do lavado articular do joelho em pacientes com gonartrose ou DDPC com atingimento do joelho.
Materiais e métodos: Estudo prospetivo aberto. Foram incluídos doentes submetidos a lavado articular do joelho na Consulta de Técnicas do Serviço de Reumatologia do Hospital de La Santa Creu I Sant Pau (Barcelona, Espanha) com capacidade para fornecer o consentimento informado para o estudo. Todos os doentes foram avaliados no momento da realização da técnica e 30 dias após a realização da mesma.

Variáveis incluídas: dados clínicos e demográficos, história de infiltração e/ou artrocentese prévia, escala visual analógica de dor (EVA Dor) e escala WOMAC (Western Ontario and McMaster Universities Arthritis Index). Foi ainda avaliado o seu nível de recuperação e satisfação subjetiva através da Escala de Likert.

Análise estatística com o Programa SPSS versão 24; foi assumido o valor de p < 0,05 para um intervalo de confiança de 95%.
Resultados: Foram incluídos 18 doentes, 13 do sexo feminino e 5 do sexo masculino, com uma média de idades de 70 anos (mínimo 54, máximo 86). Oito doentes tinham diagnóstico de DDPC, e os restantes de gonartrose, dos quais 4 no nível III de Kellgren, e 3 no nível IV. O tempo médio de duração dos sintomas foi de 57 meses. A EVA de Dor média inicial foi 7,36. O valor médio inicial da escala WOMAC foi de 37,29.

Dez doentes tinham história de terapêutica local prévia; quatro tinham sido sujeitos a 2 infiltrações com

glucocorticóides (40mg triamcinolona acetonido) e 3 tinham recebido 3 infiltrações com o mesmo agente. Quatro doentes tinham sido sujeitos a viscossuplementação com ácido hialurónico.

Uma doente não tolerou o lavado por reação vasovagal, e outro paciente não compareceu na consulta de avaliação após 1 mês. Nos restantes 16 doentes foi observada uma melhoria da EVA de Dor de 1,8 pontos (média final 5,25), estatisticamente significativa. A pontuação de WOMAC no final do estudo foi de 33,82, inferior à inicial mas sem significado estatístico. 75% dos doentes referiram satisfação com o tratamento recebido (Escala de Likert).

Não foram registadas outras intercorrências ou complicações durante ou após o lavado.

Não foram observadas diferenças entre o grupo da gonartrose e o grupo da DDPC, e também não foram encontradas diferenças relativas ao tempo de evolução, sexo, idade ou terapêutica infiltrativa prévia.

Conclusão: Neste estudo foi possível observar uma melhoria das escalas de dor um mês após a realização da técnica, pelo que concluímos que o lavado articular do joelho é uma terapêutica eficaz na abordagem da dor associada à gonartrose e DDPC do joelho. No entanto, uma vez que se trata de uma amostra pequena de doentes, são necessários estudos adicionais para aferir a sua real eficácia a longo prazo, bem como para selecionar os melhores doentes candidatos a esta técnica.

P143 – ANÁLISE DESCRITIVA DE UMA CONSULTA REUMA/DERMA: ANÁLISE DO PONTO DE VISTA DA COMPLEXIDADE INDIVIDUAL.

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Introdução: A psoríase e a artrite psoriática (AP) são doenças sistémicas crónicas inflamatórias com um amplo espectro de manifestações clinicas, e a sua abordagem e controlo efetivo exige uma avaliação multidisciplinar. Nesse sentido, o Departamento de Reumatologia e Dermatologia do Hospital de La Santa Creu I Sant Pau (Barcelona, Espanha) criaram, em maio de 2012, uma consulta conjunta denominada PAIDER (Programa de atenção interdisciplinar Derma-Reuma). O objetivo desta consulta é a colaboração no diagnóstico e tratamento de doentes com suspeita e/ou diagnóstico de AP. Após avaliação PAIDER os doentes continuam seguimento no médico assistente; no entanto, verificou-se que existe um número de doentes que devido à sua complexidade requerem um seguimento regular na consulta PAIDER.

Objetivo: Descrever e caracterizar os doentes avaliados de forma regular na consulta PAIDER, denominados doentes complexos.

Métodos: Estudo descritivo dos doentes observados na consulta PAIDER entre maio/2012 e Janeiro/2017. Variáveis incluídas: dados clínicos e demográficos, referenciação, co morbilidades, dados de tratamento e número de consultas. Foi definido doente complexo quando cumpre uma das seguintes premissas: complicações hepáticas, psiquiátricas, história neoplásica, dificuldades de comunicação, reação paradoxal ou efeito lateral grave a tratamentos prévios. O nível de complexidade foi definido de 1 a 6 de acordo com a presença aditiva dessas características.

Resultados: Foram avaliados 485 doentes (260 mulheres e 225 homens), com uma média de idade 53,63 anos. A maioria dos doentes foi referenciada de Reumatologistas (228 doentes); 197 doentes foram referenciados de Dermatologistas e os restantes 60 doentes foram do Médico de Família e outras especialidades.

Dos doentes avaliados, 168 (34,6%) foram considerados complexos (90 mulheres e 78 homens); 113 doentes (23%) foram classificados de complexidade 1, 44 (9%) com complexidade 2, 10 (4,85%) com complexidade 3 e apenas um doente com 4 níveis de complexidade. No total foram observados 49 doentes com disfunção hepática, 49 com patologia psiquiátrica, 25 com história neoplásica, 48 com reações paradoxais a tratamentos prévios, 48 com efeitos laterais a tratamentos prévios e 16 com problemas de comunicação. Dos doentes complexos, 57 foram referenciados da Dermatologia (34%), 87 da Reumatologia (51,8%) e 24 doentes do Médico de Família e outras especialidades.

Neste grupo de doentes, o uso de DMARD s convencionais foi superior após avaliação PAIDER: 30,36% *Vs* 22,62%. Também o uso de agentes biológicos aumentou após avaliação PAIDER, 34,5% *Vs* 26%.

Os doentes complexos tiveram maior número de consultas, com uma média de 2,6 consultas por paciente (mínimo 1, máximo 12), no entanto esta relação não foi estatisticamente significativa. O subgrupo de

doentes com reações paradoxais apresentou maior número de visitas em relação aos restantes (p = 0,038); o subgrupo de doentes com história neoplásica foi o que apresentou média de visitas mais baixa.

Conclusão: Na nossa coorte um terço dos doentes foi considerado complexo, e dentro nesse grupo um terço dos doentes apresentava um nível de complexidade superior a 2. O número de consultas neste grupo foi superior aos restantes, ainda que tenhamos verificado grande dispersão, com maior número de consultas no subgrupo de doentes com reações paradoxais. Assim, concluímos que estratificar os doentes por níveis de complexidade poderá ser útil para a gestão da consulta Reuma-Derma, ajudando a subdividir os doentes em grupos de risco com implicações de *follow-up*.

GRUPO 4

P127 – NÍVEIS DE VITAMINA D, AVALIAÇÃO DA FORÇA E MASSA MUSCULARES E SARCOPÉNIA NOS DOENTES COM FRATURA DA EXTREMIDADE PROXIMAL DO FÉMUR

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Introdução: As doenças do sistema musculoesquelético são um problema *major* de saúde que afetam os idosos nas suas atividades de vida diária e na sua qualidade de vida. A osteoporose e as fraturas que lhe estão associadas estão entre as patologias musculoesqueléticas com maior impacto a nível mundial. Entre as fraturas osteoporóticas, as da extremidade proximal do femur (FEPF) são as que têm maior impacto clínico. O elevado número de fraturas osteoporóticas não pode ser atribuído em exclusivo à menor resistência óssea associada à osteoporose.

Objetivos: Pretendeu-se avaliar se os níveis de vitamina D, força e massa musculares e presença de sarcopénia têm um papel nas FEPF.

Material e métodos: Estudo prospetivo, observacional, longitudinal, unicêntrico, controlado, onde se pretendeu comparar um grupo de doentes com FEPF com outro grupo que padecia de osteoartrose (OA) da anca com indicação para artroplastia. Os doentes incluídos foram submetidos a avaliação clínica, exames laboratoriais e avaliação muscular (força e massa), entre outros parâmetros clínicos e funcionais. A avaliação da força muscular foi efetuada pela força de preensão, a massa muscular foi aferida por bioimpedância elétrica, utilizando-se os valores de corte definidos por Jassen *et al* (2004). Definiu-se a concentração de vitamina D [25(OH)D3] como: deficiência grave <10 ng/mL; deficiência moderada 10-29 ng/mL e normal 30-100 ng/mL. Sarcopénia foi definida de acordo com *European Working Group on Sarcopenia in Older People* (EWGSOP) - existência de uma diminuição da massa muscular associada a uma diminuição da força muscular (ou da *performance* física).

Resultados: Obtiveram-se dois grupos: o Grupo A com 50 doentes (80% mulheres) com FEPF e o Grupo B com 40 doentes (70% mulheres) com OA da anca (grupo controlo). A média (DP) de idades dos dois grupos foi 74,96±4,49 e 73,15±4,61 anos, respetivamente, com idade mínima de 65 e máxima de 80 anos para ambos os grupos, sem diferença estatisticamente significativa para a idade ou para o género. Relativamente aos valores de preensão, 73,7% do grupo A tem valores de preensão reduzidos em comparação com 50% do B (p=0,001). Na análise por bioimpedância, verificou-se redução da massa muscular em 50% da amostra, não se observando diferença estatisticamente significativa entre os grupos. Verificou-se, por outro lado, que 50% dos doentes do Grupo A *vs* 47% do grupo B tinham índices de massa muscular reduzida. Foi identi-

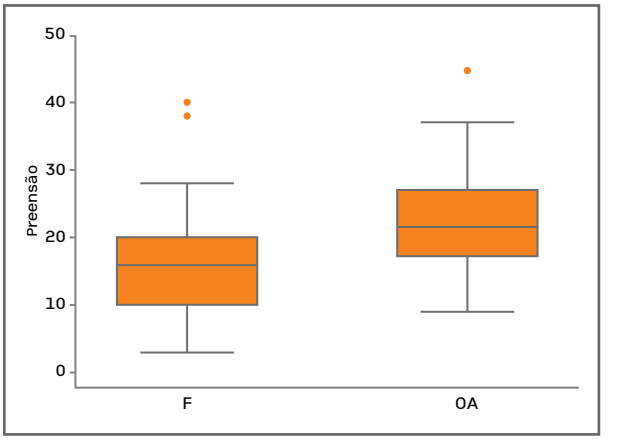

FIGURA. Distribuição da força de preensão por grupo. F: FEPF (Grupo A); AO: Osteoartrose da anca (Grupo B)

ficada sarcopénia em 40,6% dos doentes do Grupo A e 13,9% do Grupo B (p=0,015). O défice grave de vitamina D foi igualmente superior no grupo A (66% *vs* 32,5%) (p=0,0269) havendo défice ligeiro em 30% dos do grupo A *vs* 60% do grupo B. Apenas 5,6% do total de doentes em ambos os grupos apresentavam valores normais de Vitamina D.

Conclusões: Tanto quanto é do conhecimento dos autores, este é o primeiro estudo que pretende correlacionar sarcopénia com FEPF com recurso a avaliação funcional dos doentes e exames complementares de diagnóstico. Os doentes com FEPF têm mais sarcopénia, menor força de preensão, menores valores séricos de vitamina D, não se encontrando diferenças no que diz respeito à avaliação da massa muscular. Estas alterações poderão estar em relação com o aumento do risco de fratura nos idosos.

P137 – FATIGUE ASSESSMENT IN RHEUMATOID ARTHRITIS: AGREEMENT ANALYSIS BETWEEN TWO SCALES (FACIT-F AND RAID-FATIGUE)

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Introduction: Fatigue is one of the most prevalent symptoms in people with rheumatoid arthritis (RA), with an important impact on quality of life. Therefore, it should be regularly evaluated in both clinical practice and in research. There are several scales available to evaluate fatigue. Two of the most frequently used are the Functional Assessment of Chronic Illness Therapy - Fatigue (FACIT-F) and the Rheumatoid Arthritis Disease Activity Index (RAID-Fatigue). FACIT-F is a longer scale, taking 3 to 5 minutes to complete, and some of the items could be difficult to understand or repetitive. This study assesses if an easier and quicker instrument, RAID-Fatigue, could replace it in clinical practice.

Objectives: To evaluate the correlation and agreement between two quantitative measurements of fatigue (FACIT-F and RAID-fatigue).

Methodology: This was a cross-sectional, single centre study with consecutive ambulatory RA patients. Fatigue was measured by item 3 of the RAID score, through a numerical rating scale (range 0-10) and FACIT-F a 13-item Likert scale instrument (total range 0-52). Spearman's correlation was used to evaluate the cross-sectional associations. Correlation was categorized as strong (r≥0.60), moderate (r=0.40-0.59) and poor (r<0.40). After z-scores calculations, Bland–Altman analysis was used to evaluate the agreement between the two scales.

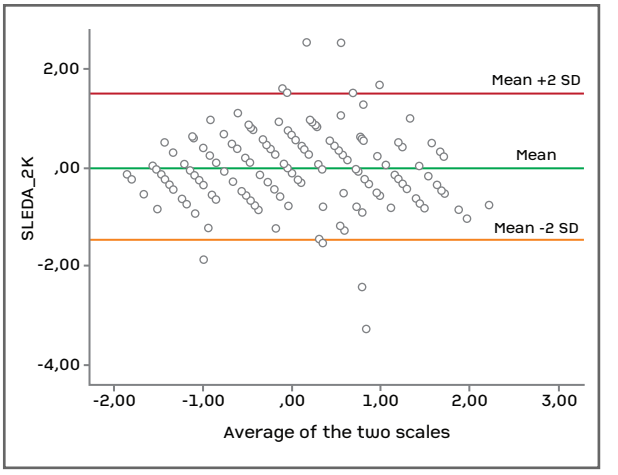

FIGURE. Bland–Altman analysis to evaluate the agreement between FACIT-F and RAID-fatigue in rheumatoid arthritis patients.
The difference of the two scales is plotted against the mean of the two. Horizontal lines are drawn at the mean difference, and at the limits of agreement, which are defined as the mean difference plus and minus 1.96 times the standard deviation of the differences

Results: In total, 182 patients were included mostly female (80.8%), with a mean age of 59.7 years old (SD=12.4), a mean disease duration of 11.8 years (SD=9.0) and a mean of disease activity (DAS28 3v) of 2.8 (SD=1.0). Biological therapy was used by 16.5% participants.

RAID-fatigue and FACIT-F presented a high and statistically significant correlation (r=0.74; p<0.05). Regarding Bland-Altman analysis, the mean difference (bias) was 0.02 (SD=0.8) and the 95% confidence interval limits of agreement between the two methods ranged from -1.46 to 1.49 (Figure 1).

Conclusion: There was a high agreement between the two scales. There was no bias in the evaluation and the two methods consistently provide similar measures. Therefore, the single item RAID-Fatigue seems suitable for routine use in clinical care of RA patients with no disadvantages compared to a longer scale (FACIT-F).

P138 – STATISTICAL PREDICTORS OF FATIGUE IN PATIENTS WITH RHEUMATOID ARTHRITIS: A CROSS-SECTIONAL STUDY

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Introduction: Rheumatoid Arthritis (RA) is a chronic, inflammatory disease with high impact in patients' quality of life. Fatigue is, frequently, a troublesome symptom in patients with RA, even among those in remission. Nevertheless, this symptom is frequently ignored by clinicians. The identification of predictors of fatigue may improve the understanding and management of fatigue in patients with RA in clinical practice.
Objectives: To evaluate fatigue and its statistical predictors in RA patients.
Materials and Methods: This was a cross-sectional, single centre study including consecutive ambulatory RA patients. Fatigue was measured by RAID fatigue, a numerical rating scale (range 0-10). Other assessed variables comprised disease activity (DAS28-PCR 3v), patient global assessment (PGA), disease duration, haemoglobin, pain (Visual Analogic Scale), function (Health Assessment Questionnaire, HAQ), anxiety and depression (Hospital Anxiety and Depression Scale, HADS), happiness (Subjective Happiness Scale, SHS), personality traits (Ten Item Personality Measure, TIPI) and comorbidities. Disease activity categories were defined as: 1) remission (ACR/EULAR 2011 boolean-based definition), 2) near-remission (only PGA>1), and 3) non-remission (Ferreira et al., 2016). Univariate (student t-test and Pearson's correlation) and multivariable analyses (stepwise, linear regression) were used to identify predictors of fatigue in RA patients. Correlation was categorized as strong (r≥0.60), moderate (r=0.40-0.59) and poor (r<0.40).
Results and Discussion: In total, 313 patients were included, mostly female (81.8%), with a mean age of 59.7 years (SD=12.3) a mean disease duration of 11.9 years (SD=9.0) and a mean DAS28 PCR (3v) score of 2.8 (SD=1.1). Biological therapy was used by 30.4% participants. The mean score of fatigue was 5.1 (SD=2.7). In univariate analyses fatigue was statistically ($p<0.05$) higher in women (W=5.3 *vs* M=4.5) and was statistically ($p<0.001$) lower in patients under boolean remission (1.8 *vs* near remission=5.1 *vs* non-remission=5.7). Furthermore, a strong correlation was observed between fatigue and pain and PGA, moderate correlation with anxiety and depression and, finally, a poor correlation with age, formal education, comorbidities, disease activity, haemoglobin, happiness, extraversion, emotional stability and openness to experience (Table 1).

In multivariable analyses, fatigue was statistically explained (R2adjusted=0.60, $p<0.001$) only by PGA (B=0.19), pain (B=0.45), function (B=0.61) and anxiety (B=0.10). All the variables in this model presented a positive correlation with fatigue.
Conclusion: The variables that best predicted fatigue were those related to patients' assessment and symptoms. The biological component, such as disease activity and haemoglobin, appeared to play a minor role. This finding may be crucial in shifting the paradigm of patient care towards a more holistic view with the active integration of adjunctive therapies in association with measures driven towards disease remission.

TABLE. PEARSON'S CORRELATIONS BETWEEN RAID-F AND AGE, DISEASE DURATION, FORMAL EDUCATION, COMORBIDITIES, DISEASE ACTIVITY, HAEMOGLOBIN, PAIN, PGA, HAQ, HADS, HAPPINESS AND PERSONALITY TRAITS

	Age	Disease Duration	Formal Education	Comorbidities	DAS 28 PCR (3v)	Hb (gr/dL)	Pain	
RAID-F	0,26*	0.08	-0,29*	0,39*	0,26*	-0,15*	0,73*	
	PGA	HAQ	HADS-A	HADS-D	HSS	TIPI Extraversion	TIPI emotional stability	TIPI openness to experience
RAID-F	0,68*	0,60*	0,55*	0,56*	-0,27*	-0,27*	-0,26*	-0,22*

*p<0,05

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P110 – IMPACT OF PSORIATIC ARTHRITIS ON PSORIATIC PATIENT'S QUALITY OF LIFE – SUB-ANALYSIS OF PESSOA, A PATIENT REPORTED OUTCOMES STUDY

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Background & Objective: Psoriasis is a chronic inflammatory disorder, presenting several types of manifestations (namely dermic (PsO) and arthritic (PsA)) that impact significantly the patient's quality of life (QoL), with social and economic impact on patients and Healthcare Systems (HS), frequently undervalued. Globally there is available evidence that characterizes healthcare resource use from a societal and HS perspective but there is scarce information on the patient's perspective on these diseases.

PeSsoA study was an observational cross-sectional study in adult patients with psoriasis to characterize sociodemographic profile, health behaviors, clinical and therapeutic profile, psoriasis related social impact, QoL and healthcare resource use through Patient Reported Outcomes (PRO).

This analysis aimed to characterize PsO patients with and without PsA, and evaluate the disease impact on patient QoL.

Methodology: Data collection was performed through an electronic questionnaire fulfilled directly by participating patients, placed on an online platform and disseminated by three channels: PSOPortugal - by direct contact with associates, through the patients association website and facebook; 2) Study Physicians/ healthcare Professionals with clinical activity in the main Portuguese hospitals; 3) National media. The recruitment period was 2 months (1 June- 31 July 2016). PeSsOa study included 564 patients from the 631 received questionnaires. This analysis included patients with Psoriasis and associated PsA. Comparisons were performed between patients with both diagnosis (PsO and PsA) and patients with PsO and without PsA.

Results: PsA was reported by 126 patients (22.4%), 63.5% (n=80) females, mean age of 47.2±12.9 years, 58.7% (n=74) aged < 50 years old. The majority were active workers (65.1%) and 44.4% had high school graduation. The most common type of psoriasis was plaque psoriasis (67.5%). Time since diagnosis was more than 10 years previously to questionnaire application for 74,6% of included patients, and only 3,2% were diagnosed in the previous year. Based on patient reported Bosy Surface Area - BSA (% of body surface with lesions) 67.8% of patients had moderate to severe psoriasis. Comparing to other patients, PsA's patients presented a higher prevalence of depression/ anxiety (37.7% *vs* 21.9%; p=0.002) and hypertension (30.2% *vs* 16.6%; p<0.001).

In what concerns clinical follow-up of psoriasis the majority of patients were observed by dermatology physicians in both groups (54.4% in PsA group; 64.0% in non PsA patients) although more patient in PsA group were followed by rheumatologist (23.0% *vs* 0.8%).

Regarding quality of life results, using the EQ-5D--3L, patients with PsA had worse results in the anxiety/depression dimension (62,6% reported moderately anxious or depressed and 9,3% extremely anxious or depressed) and pain/discomfort dimension (60,7% reported moderate pain or discomfort and 14,9% extreme pain or discomfort). PsA patients also had a significant worse score (59.4 *vs* 70.6; p<0.001).

Conclusions: Results of this sub analysis reinforce the burden of PsA associated with PsO, with impact on patient QoL PsA patients had higher prevalence of comorbidities, namely depression and hypertension, when compared with PsO patients without PsA diagnosis. The integration of study results that reflect patients' perspective should increasingly be integrated with established clinical data, in order to improve disease awareness and obtain more real-life outcomes evaluation for psoriasis and PsA patients.

P204 – REDUÇÃO DA DOSE OU AUMENTO INTERVALO DE TERAPÊUTICA BIOLÓGICA – EXPERIÊNCIA DE UM SERVIÇO

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Introdução: O paradigma das doenças reumáticas como a Artrite Reumatóide (AR), as Espondilartrites (Esp) e Artrite Psoriática (AP) mudou com o surgimento das terapêuticas biológicas. Estas terapêuticas podem levar a remissão sustentada em alguns doentes, o que levanta a questão do ajuste da dose do fármaco ou mesmo a sua eventual descontinuação[1]. Alguns trabalhos demostram que esta estratégia é eficaz e custo-efetiva face a doentes tratados com dose standard[2–6].
Objectivo: Apresentar a experiência de um serviço de Reumatologia com a redução da dose ou aumento do intervalo das administrações da terapêutica biológica em doentes com AR, Esp e AP tratados com Adalimumab (ADA), Etanercept (ETN), Infliximab (INF) e Tocilizumab (TCZ).
Métodos: Análise descritiva da informação recolhida através da consulta de processos clínicos de doentes que reduziram a dose do fármaco biológico ou espaçaram o intervalo das administrações: dados demográficos; caracterização da doença reumática; terapêutica biológica; terapêutica concomitante; *follow-up* após modificação da dose, incluindo número de recidivas e atitudes tomadas.
Resultados: De 224 doentes com AR, Esp e AP tratados com as terapêuticas supracitadas, 30 reduziram terapêutica biológica: 10 (9,2%) com AR, 5 (15,6%) com

QUADRO 1. DESCRIÇÃO DOENTES COM AP, AR E ESP DE ACORDO COM TEMPO DE EVOLUÇÃO DA DOENÇA, TERAPÊUTICA BIOLÓGICA E CONCOMITANTE, TEMPO EM BAIXA ATIVIDADE DA DOENÇA ANTES E DURANTE REDUÇÃO, TEMPO E ESTRATÉGIA EM REDUÇÃO, NÚMERO DE DOENTES COM RECIDIVAS E DESTES OS COM NECESSIDADE DE REAJUSTE DE TERAPÊUTICA E DOENTES COM PARAGEM DO FÁRMACO

	Artrite Psoriática N=5	Artrite Reumatóide N=10	Espondilartrites N= 15
Duração média da doença (anos)	16,0 (11,7)	14,8 (9,1)	21,9 (7,2)
Terapêutica concomitante N (%)	5 (100)	10 (100)	4 (26,7)
MTX/LEF/SLZ	5 (100)	10 (100)	0
CS	1 (20)	2 (20)	0
AINEs	1 (20)	1 (10)	4 (26,7)
Terapêutica biológica N (%)			
ADA	2 (40)	2 (20)	4 (26,7)
ETN	3 (60)	3 (30)	5 (33,3)
INF	0	2 (20)	6 (40)
TCZ	0	4 (40)	0
Falência prévia a biológico N (%)	0	2 (20)	3 (20)
Tempo total em biológico em anos (dp)	6,1 (2,1)	8,7 (3,8)	10,2 (2,5)
Doentes com DAS 28 <3.2/BASDAI <4 antes de redução N (%)	5 (100)	10 (100)	15 (100)
Anos em baixa atividade /remissão antes da redução do biológico (dp)	3,1 (1,7)	2,3 (1,9)	4,0 (2,7)
Estratégia de redução N (%)			
Redução dose	0	2 (20)	4 (26,7)
Aumento intervalo	5 (100)	8 (80)	11(7,3)
Follow-up em anos após redução (dp)	2,3 (0,8)	1,9 (1,0)	3,9 (3,9)
Anos em baixa atividade da doença/remissão após redução (dp)	2,2 (1,1)	1,8 (1,1)	3,8 (3,9)
Número de doentes com recidivas N (%)	1 (40)	4 (40)	1 (6,7)
Necessidade de reajuste da terapêutica N (%)	1 (20)	2 (20)	1 (6,7)
Paragem fármaco por remissão da doença	1 (20)	2 (20)	1 (6,7)

MTX – Metotrexato, LEF – Leflunomida, SLZ – Sulfassalazina, CS- Corticoides Sistémicos, AINEs –anti-inflamatórios não esteroides

AP e 15 (18,1%) com Esp, tendo estes uma idade média de 52,1 (+/- 13,8) anos e sendo 14 (45,2%) do sexo feminino. Os doentes com Esp tiveram um maior tempo de *follow-up* após modificação da dose do biológico, enquanto que o maior número de recidivas ocorreu no doentes com AR (Quadro 1).

Seis doentes tiveram 1 ou 2 recidivas durante a estratégia de redução (se DAS 28 ≥3.2 ou BASDAI≥4), 4 com necessidade de reajuste do biológico. Nos restantes, a estratégia tomada foi ajuste da terapêutica concomitante (metotrexato) e uso de corticoides sistémicos. Apenas em 1 caso houve necessidade de mudança para outro biológico, que ocorreu 5 anos após o espaçamento do intervalo da administração do fármaco.

Os doentes com recidivas tinham maior duração da doença, menor tempo em baixa atividade da doença antes de iniciar a redução do biológico e maior percentagem estava sob terapêutica concomitante com corticoides sistémicos e/ou AINEs.

Discussão/Conclusão: Apesar da dimensão reduzida da amostra, esta estratégia foi bem-sucedida. A maioria dos doentes manteve baixa atividade da doença ou remissão sem necessidade de novo reajuste terapêutico, tendo 4 doentes parado o biológico por remissão. De notar que, em apenas um caso houve necessidade de *switch*.

P166 – CAN THE USE OF NEW TECHNOLOGIES IMPROVE THE USE OF PATIENT REPORTED OUTCOMES (PROS) AND PATIENT PARTICIPATION IN A NATIONAL REGISTRY?

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Introduction: PROs are especially useful in the management of rheumatic diseases in complement to physician evaluation. However they are time consuming and used in a limited manner in the daily clinical practice.

Reuma.pt is the Portuguese national rheumatic diseases register and one of the few registries in Europe that allows the patient to do at home the PROs before the appointment. In our institute we have complemented that with the creation of a paper free day hospital with the use of touch screen computers that also allows the patient to do the PROs before the clinical evaluation by the rheumatologist.

Objectives: to compare the impact of the use off Reuma.pt at home PROs completion platform before and after the utilization of touch screen computers in the day hospital.

Methods: We determined the number of patients and appointments with the use at home of the PROs platform one year prior to the introduction of the touch screen computer at our day hospital (October 2014 –October 2015) and one year after the paper free day hospital was installed (November 2015-November 2016). To determine any change of pattern of the use

TABLE.

	T0 October 2014 to October 2015	T1 November 2015 to November de 2016
Number of appointments with PROs done at home/ total of appointments with completed PROs / percentage	93/419/22.1%	216/448/48,2%
Number of patients with PROs done at home	57	106
Age	45.19 ± 10.33	49.82 ± 11.54
Sex	40F + 17M	75F + 31M
Mean school years	11.79 ± 3.96 (N=29)	10.35 ± 4.3 (N=68)
Under biologics	53 Appointments (56.99%)	162 Appointments (75%)
Diagnosis	43 AS, 11 RA e 3 PsA	61 AS, 33 RA e 12 PsA

at home of the platform and the relations between that and patients characteristics.

Results: When we analyse the available variables between the patients that performed the PROs at home we found for both periods considered that they were younger (45,2/49,8 *vs* 53,4/55,1 p <0.001) they have more education (11.8/10.35 *vs* 8.2/ 7,9) no differences were found regarding gender. There is a tendency that with the continuous use of touchscreen computers at the day hospital less educated (T0 -11.8, T1-10.35 school years) and older patients (T0- 45,2/ T1 -49,8 years) are using more at home platform of Reuma.pt.

Conclusion: The use of technology could have a consider impact on the way we collected data from our patients. With the use of a touchscreen computer we have improved not only the overall completion of PROs but also increased the familiarity of patient to the online questionnaires. Number of appointments with previous at home completion of the questionnaires more than double. This has a clear impact on patient participation, quality of data in the registry but even more impact on time and human resources at a day hospital.

P136 – NEW PROTEIN PANEL FOR RHEUMATIC INFLAMMATORY DISEASES DIAGNOSIS

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Background: Rheumatoid arthritis (RA)1, systemic lupus erythematosus (SLE)2 and ankylosing spondylitis (AS)3 are common inflammatory rheumatic diseases where an early diagnosis might influence the overall prognosis. Research for proteomic biomarkers of early diagnosis has been intensive but just a few of them have been validated up to now.

Aims: We have performed a pilot study to find urine biomarkers or differentially express proteins patterns of the above-mentioned diseases. Urine was chosen due to its invaluable properties as sample, namely, it is taken in a non-invasive way, is readily available and it is in large quantities.

Methods: Patients diagnosed with RA or SLE or AS and healthy controls (HC) were matched by age and gender and they were involved in this study. Urine samples were collected for analysis following standard procedures. Two-dimensional gel electrophoresis (2-DE) was used as a tool to interrogate the samples. Differentially expressed spots, DES, were identified using the SameSpot software via Anova test ($p \leq 0.05$). DES were excised and treated for protein identification by MALDI-TOF-MS.

Results: 51 urine samples from 24 RA, 12 SLE, 10 AS patients and 10 HC were analyzed. Preliminary analysis of the proteins identified shows that the majority of the proteins identified are involved in cellular and regulation processes, with functions in blood microparticles, iron transportation, protein depolarization or engulfment by phagocytosis. Some of the proteins differentially expressed are associated with these diseases for the first time, as polymeric immunoglobulin receptor, protein AMBP, glutaminyl-peptide cyclotransferase or endosialin.

Conclusions: This study has allowed the identification of a panel of proteins with potential interest for diagnosis purposes of RA, SLE and AS and it brings new light into the physiopathology of these diseases.

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P6 – CELASTROL PRESERVES BONE STRUCTURE AND MECHANICS IN ARTHRITIC RATS

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Background: Despite recent progress in rheumatoid arthritis (RA) management, adverse effects, lack of efficacy and economic barriers to treatment access still limit therapeutic success. Therefore, safer and less expensive treatments that control inflammation and bone resorption are needed. We have previously shown that celastrol is a candidate for RA treatment. We have previously observed that it inhibits both IL-1β and TNF in vitro, and that it has significant anti-inflammatory properties and ability to decrease synovial CD68+ macrophages (biomarker of therapeutic response) in vivo.
Objective: Herein our goal was to evaluate the effect of celastrol in local and systemic bone loss.
Methods: Celastrol was administrated intraperitoneally at a dose of 1µg/g/day to female Wistar adjuvant-induced arthritis (AIA) rats both in the early phase (4 days after disease induction, N=15) and late phase (11 days after disease induction, N=15) of disease progression. A group of healthy non-arthritic and untreated arthritic female age-matched Wistar rats were used as controls in all experiments. Rats were sacrificed after 22 days of disease progression and blood, femurs, tibias and paw samples were collected for bone remodeling markers quantification, 3-point bending test, micro-computed tomography analysis, nanoindentation and FTIR measurements, and immunohistochemical evaluation.
Results: We have observed that celastrol preserved articular structures and decreased the number of osteoclasts (cathepsin k+ cells) and osteoblasts (osteocalcin+ cells lining bone) present in arthritic joints. Moreover, celastrol reduced serum TRACP-5b, P1NP and CTX-II levels. Importantly, celastrol prevented bone loss and bone microarchitecture degradation, with improvement of both trabecular and cortical parameters. Celastrol also preserved bone cortical nanoproperties as well as collagen and mineral content. Additionally, animals treated with celastrol since the early phase of arthritis have less fragile bones, as depicted by an increase in maximum load and yield displacement.
Conclusions: These results suggest that celastrol reduces both bone resorption and cartilage degradation, halted joint destruction, and preserves systemic bone structure and mechanics, and thus may serve as a useful therapeutic agent for the treatment of inflammation-induced bone damage.

GRUPO 5

P23 – A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED PHASE 3 STUDY EVALUATING TREATMENT STRATEGIES (CONTINUATION VERSUS WITHDRAWAL) FOR MAINTAINING LOW DISEASE ACTIVITY AFTER 1 YEAR OF CERTOLIZUMAB PEGOL IN DMARD-NAIVE PATIENTS WITH EARLY AND PROGRESSIVE, ACTIVE

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Background/Purpose: There is interest in tapering or stopping biologic DMARD therapy in RA patients (pts) who have achieved sustained disease control.1 We report the results from C-EARLY Period 2 (P2), in which pts continuing on certolizumab pegol (CZP; standard and reduced dose-frequency) were compared with pts stopping CZP.
Methods: Pts from C-EARLY Period 1 (P1; NCT01519791)[2] treated with dose-optimized MTX and CZP (200 mg Q2W) or placebo (PBO) who achieved sustained low disease activity (sLDA; DAS28[ESR] ≤3.2 at Weeks [wks] 40 and 52) entered P2 (NCT01521923),[1] a randomized, double-blind dose

withdrawal study. CZP-treated pts were randomized 2:3:2 to CZP standard dose (200 mg Q2W+MTX), reduced dose-frequency (200mg Q4W+MTX) or CZP stopped (PBO+MTX). The primary endpoint was the percentage of pts in maintained (Wks 52–104 without flares) LDA. The hierarchical testing scheme compared CZP standard dose *vs* CZP stopped; if p<0.05 was achieved, then CZP reduced dose-frequency *vs* CZP stopped was compared. Data presented use imputation: NRI for primary endpoint; LOCF for continuous variables; linear extrapolation for mTSS.

Results: The study was powered assuming 455 CZP-treated pts would achieve sLDA in P1 and enter P2; however, only 293 pts (64%) were eligible and entered P2. 49% CZP standard and 53% reduced dose-frequency pts in sLDA were able to maintain LDA to Wk 104 *vs* 39% CZP stopped pts (p=0.112 and p<0.05, respectively; the study did not achieve its primary endpoint). 44% CZP standard and 43% reduced dose-frequency pts were able to maintain REM to Wk 104 *vs* 33% CZP stopped pts. Overall, a higher proportion of CZP-treated pts (standard and reduced dose-frequency) achieved LDA at Wk 104 *vs* CZP stopped pts (Figure A). At Wk 104, more pts continuing CZP (standard and reduced dose-frequency) had radiographic non-progression (change from baseline mTSS ≤0.5) *vs*

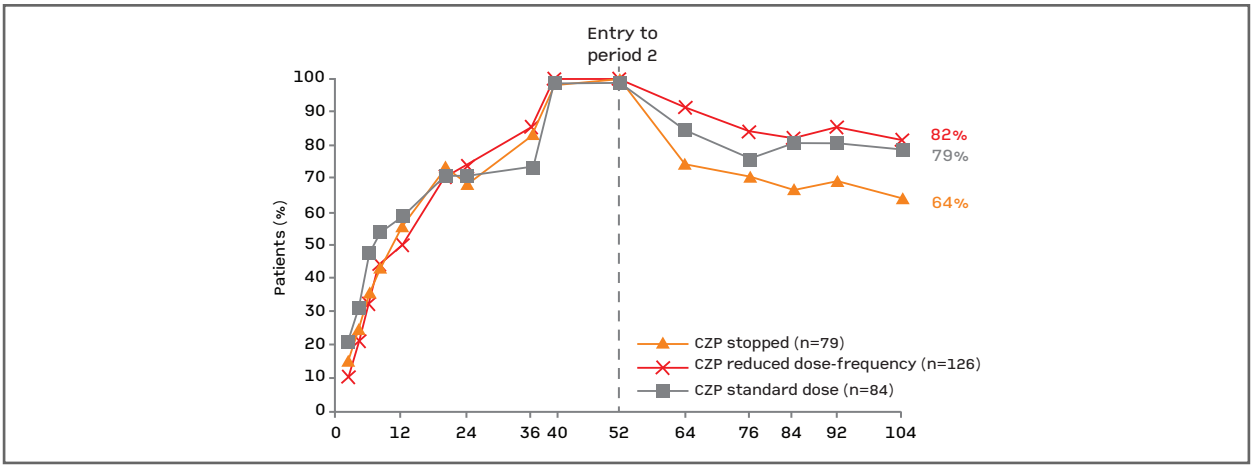

FIGURE A. Percentage of patients in DAS28(ESR) LDA from baseline to Week 104 (LOCF)
293 patients were randomized: 84, 127, and 82 patients to CZP standard, reduced dose-frequency, and CZP stopped; P2 full analysis set data shown (all patients with a valid post-Week 52 efficacy measurement within P2 for the primary efficacy assessment, DAS28[ESR]). LDA: DAS28(ESR) ≤3.2.

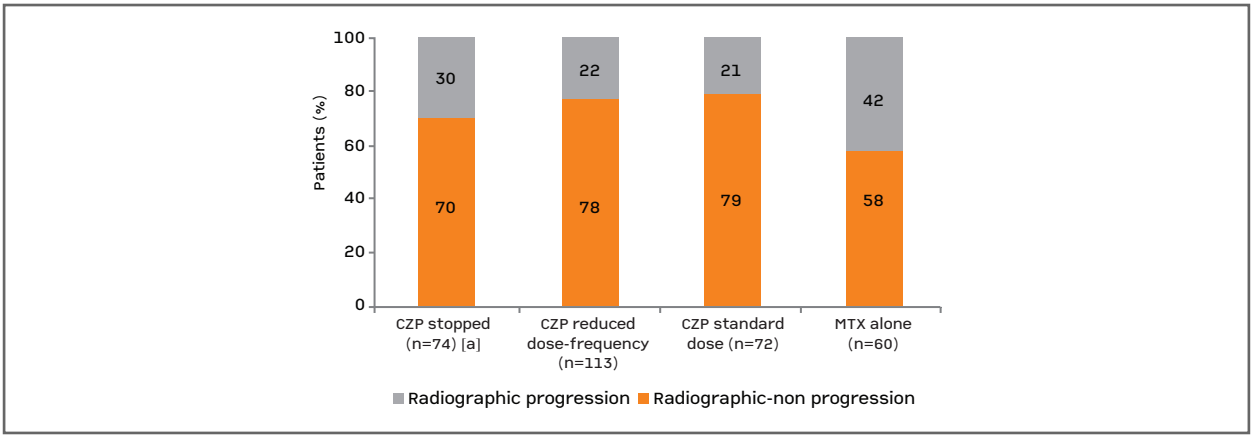

FIGURE B. Percentage of patients with radiographic non-progression at Week 104 (linear extrapolation)
CZP stopped CZP reduced CZP standard (n=74) [a] dose- dose frequency (n=72) (n=113) Radiographic set (those patients with valid radiographs at baseline, Week 52, and Week 104/Withdrawal visit). Radiographic non-progression: change from baseline in mTSS 13.5 based on linearly extrapolated scores. [a] 1 outlier excluded from analysis in this group. MTX alone data from a post-hoc analysis.

CZP stopped and MTX alone pts (Figure B). The safety profiles of all 4 groups were similar, with no new safety signals for pts continuing CZP treatment up to 2 years.

Conclusion: The study did not achieve its primary endpoint of maintained LDA at all visits in CZP treated pts (standard and reduced dose-frequency) *vs* those who stopped CZP; however, there was a numerical difference between these groups. One possible reason may have been that 36% fewer pts were eligible for P2 than planned, based on the entry criteria. A higher proportion of CZP-treated pts (standard and reduced dose-frequency) achieved LDA and radiographic stabilization compared with those who stopped CZP. Additionally, despite clinical improvement, more pts treated with MTX alone experienced radiographic progression than pts treated with CZP over 2 years.

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P84 – PATIENT-CENTERED AGING BIOBANKS – A SURVEY ON PUBLIC PERCEPTIONS AND PATIENT CHOICE AMONG RHEUMATOLOGY OUTPATIENTS

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Background: Biobanks for research (BBR)are organized repositories of biological materials and associated health information with enormous potential and value for scientific research. In consonance with increasing attention to healthy aging research, BBR specifically oriented to chronic diseases and aging populations have gathered heightened attention. Public perceptions and patient choices are key to design, develop and implement patient-centered BBR. Public awareness, education and involvement are confidence building and unequivocally lead to higher participation in scientific enterprises.

Objectives: To assess patient awareness, perception and choices regarding aging biobanking activities.

Methods: We developed and applied a standard anonymous questionnaire to rheumatology terciary outpatients, aged 50 or older, between March-October 2016. Demographic data and perceptions about biobanking were collected. Data analysis was performed using Stata 14® software.

Results: We obtained a total of 131 valid responses [age (min-max, 50-93), mean (64); sex ratio (M/F) (40/91, 44%), education years (min-max, 0-20), mean (8.5)]. 69% of respondents did not know the specific term "biobank" but 57% were aware about the possibility of donating their biological material for research purposes. Furthermore, 77% of respondents indicated they were willing to contribute with their biological material to BBR, stating they had no particular preference whether these infrastructures were of private or public nature. However, they expressed a clear preference for these to be based at scientific research institutes (50%), instead of hospitals (23%), universities (16%) or biotechnology companies (7%). Moreover, respondents highlighted diferent requirements for their participation with anonymity (31%) and confidentiality (27%) ranking as top priorities. Most importantly, a majority of respondents (70%) expressed their agreement with a biobank exclusively dedicated to the study of aging, considering that people of older ages have higher disease burdens and that such research infrastructures and practices expressed respect for the particular problems of the elderly (Figure).

Conclusions: Our study constitutes a comprehensive

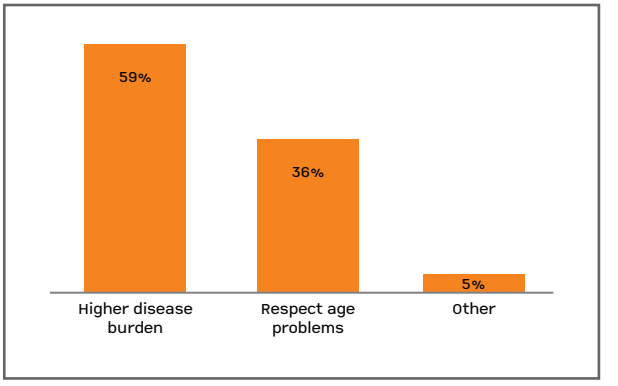

FIGURE. Why dedicated aging Biobanks?

assessment of public perceptions and patient choices regarding biobanks for aging research purposes among rheumatology outpatients. Although awareness is still suboptimal, BBR are highly regarded health infrastructures with enormous potential for further patient-centered development.

Disclosure of Interest: None declared

P122 – DO ANXIOUS OR DEPRESSIVE RHEUMATOID ARTHRITIS PATIENTS ON BIOTECHNOLOGIC THERAPY HAVE WORSE DISEASE ACTIVITY, FUNCTION AND QUALITY OF LIFE?

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Background: Depression, anxiety and fatigue are common symptoms in rheumatoid arthritis (RA) patients, and seem to influence disease activity, pain, quality of life (QoL) and treatment response.

Objectives: To assess disease activity, function and QoL in RA patients with symptoms of anxiety/depression.

Methods: Observational, cross-sectional study including RA patients on bDMARD followed at our centre, registered at Reuma.pt with >/=1 evaluation from 2015/11 to 2016/07. Clinical data including DAS28, CDAI, SDAI, TJC, SJC, patients' and physicians' pain/global assessments (VAS), ESR, CRP, HAQ, EQ5D, HADS score (anxiety and depression domains, cutoff >/=8) and FACIT-F were collected. Data were analyzed using Mann-Whitney, Qui-Squared and Spearman correlation, p<0.05.

Results: 182 patients enrolled, 84.6% female, mean: age at 1st bDMARD 53.8±11.1; time since diagnosis 16.2±9.3 years; DAS28 3.54±1.3; CDAI 10.2±9.6; SDAI 11.2±10.4; HAQ 0.97±0.6; HADS-Anxiety 7.13±4.5; HADS-Depression 6.62±4.54, FACIT-F 35.1±9.2, EQ-5D 0.36±0.2. 77 (44.5%) patients scored >/=8 in the HADS-Anxiety domain and 71 (41.0%) scored >/=8 in the HADS-Depression domain. Comparison of depressive *vs* non-depressive and anxious *vs*

TABLE. COMPARISON OF ANXIOUS VS NON-ANXIOUS AND DEPRESSIVE VS NON-DEPRESSIVE PATIENTS

	HADS-A <8	HADS-A >/=8	p	HADS-D<8	HADS-D >/=8	p
N	96	77		102	71	
Gender (M%)	18.8%	9.1%	0.073	18.6%	8.5%	0.061
Age at diagnosis, mean±SD (years)	44.5±13.2	45.4±12.7	0.606	42.3±12.7	48.5±12.5	0.009
Age at 1st bMARD, mean±SD (years)	53.6±11.1	54.9±10.0	0.422	52.4±10.3	56.8±10.6	0.008
HADS-A, mean±SD				4.99±3.5	10.2±4.04	<0.001
HADS-D, mean±SD	4.1±3.6	9.6±3.7	<0.001			
HAQ, mean±SD	0.75±0.6	1.26±0.6	<0.001	0.7±0.5	1.3±0.6	<0.001
DAS28 ESR, mean±SD	3.1±1.1	4.0±1.4	<0.001	3.1±1.0	4.1±1.5	<0.001
28 TJC, mean±SD	1.83±3.3	4.95±5.8	<0.001	1.92±3.1	5.08±6.1	<0.001
28 SJC, mean±SD	1.02±1.7	1.86±2.7	0.042	0.97±1.5	2.00±2.9	0.020
PGA (VAS), mean±SD	28.46±23.2	46.3±24.1	<0.001	28.9±23.03	47.3±24.2	<0.001
Patients' pain assessment (VAS), mean±SD	28.4±22.5	46.4±26.2	<0.001	28.8±22.4	47.3±26.5	<0.001
PhGA (VAS), mean±SD	15.9±13.9	23.8±20.6	0.022	14.4±12.7	26.5±20.8	<0.001
ESR (mm/H), mean±SD	26.42±19.6	28.43±21.2	0.513	25.3±18.4	30.2±22.6	0.190
CRP (mg/L), mean±SD	6.9±10.9	9.3±23.5	0.771	6.1±8.9	10.6±25.3	0.808
CDAI, mean±SD	7.3±7.1	13.8±11.2	<0.001	7.2±6.4	14.5±11.7	<0.001
SDAI, mean±SD	8.2±7.4	14.96±12.4	<0.001	7.97±6.7	15.8±12.97	<0.001
FACIT-F, mean±SD	39.8±7.5	29.3±7.7	<0.001	39.1±7.8	29.4±8.2	<0.001
EQ5D, mean±SD	0.43±0.17	0.28±0.20	<0.001	0.44±0.17	0.26±0.19	<0.001

non-anxious groups appears on table 1. There was a correlation of HADS-Anxiety with DAS28 (r=0.391, p<0.001), CDAI (r=0.441, p<0.001), SDAI (r=0.426, p<0.001), HAQ (r=0.509, p<0.001), FACIT-F (r=-0.669, p<0.001) and EQ5D (r=-0.592, p<0.001). There was a correlation of HADS-Depression with DAS28 (r=0.389, p<0.001), CDAI (r=0.455, p<0.001), SDAI (r=0.439, p<0.001), HAQ (0.596, p<0.001), FACIT-F (r=-0.679, p<0.001) and EQ5D (r=-0.659, p<0.001).

Conclusions: Anxious or depressive patients showed higher disease activity, especially in measures with some subjectivity (such as TJC and PGA) but not regarding ESR or CRP and worse function and QoL. This fact must be taken into account when evaluating therapeutic efficacy.

P90 – MEDIAN NERVE ULTRASOUND FINDINGS AND CLINICAL CORRELATIONS IN PATIENTS WITH SYSTEMIC SCLEROSIS: A COMPARATIVE ANALYSIS WITH MATCHED CONTROL SUBJECTS

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Background: Median nerve (MN) entrapment in the carpal tunnel seems to be common in patients with Systemic Sclerosis (SSc). Ultrasound (US) evaluation of MN in SSc patients was performed in some previous studies but conclusions were not linear[1].

Objectives: To compare specific MN US parameters of patients with SSc and a group of age and sex matched controls. To understand if specific clinical variables correlate with US parameters assessed in the group of SSc patients.

Methods: We conducted a cross-sectional study comparing MN US parameters of SSc patients followed up at our Rheumatology Unit and control subjects. Exclusion criteria included body mass index (BMI)>30, previous wrist trauma and known diagnosis of carpal tunnel syndrome. Forty-eight out of 62 SSc patients and 45 healthy age and sex matched controls were enrolled. Subjects were consecutively evaluated in our Department. A General Electric LOGIQ S8 US with a 15 MHz linear transducer was used for assessment. MN cross-sectional area (MNA) and perimeter (MNP) of both sides of each person were measured at the level of the carpal tunnel inlet. For comparative analysis, the mean MNA and MNP of combined right and left side were used. Patients' relevant clinical and demographic data were collected. Modified Rodnan skin score (mRSS), hand mobility (HAMIS) and SSc Severity Scale (SScSS) were also assessed. Statistical analysis included Chi-Square test, Mann-Whitney U-test, Kruskal--Wallis and Spearman correlation coefficient. P value <0.05 was defined as statistically significant.

Results: A total of 186 MN were assessed by US. Both groups had the same proportion of diabetes and history of tunnel carpal surgery (p=0.803 and p=0.339, respectively). Median of MNA and MNP were significantly higher in SSc patients (7.5 mm2 [6.6 to 9.5] and 13.8 mm [12.4 to 15], respectively) (median [interquartile range]) compared with controls (7.0 mm2 [6 to 8] and 12.9 mm [11.7 to 14], respectively) (p=0.021 and p=0.018, respectively). Higher mRSS correlated with higher MNA (Spearman s rho=0.335, p=0.02) and MNP (rho=0.336, p=0.02). Values of MNA and MNP did not correlate with age, disease duration, HAMIS and SScSS, and were similar according to categories of gender and subset of disease (p>0.05). However, median of MNA and MNP were significantly different between the 3 phases of skin involvement (p=0.007 and p=0.009, respectively), being higher in patients in the oedematous phase (median MNA of 9.25 mm2 [7.5 to 11.5] and median MNP of 14.5 mm [13.5 to 16.9]).

Conclusions: Our study confirmed an increased MNA and MNP in SSc patients in comparison with healthy age and sex matched controls. Patients in the oedematous phase of skin involvement and patients with higher skin thickness assessed by mRSS showed higher MNA and MNP values.

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P43 – PREDICTORS OF MORTALITY AND RE-FRACTURE AT 1 AND 3YEARS AFTER HIP FRACTURE

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TABLE. MORTALITY AND REFRACTURE PREDICTORS

	Mortality		Re-fracture	
	p-value	Exp(β)	p-value	Exp(β)
Gender	.106	2.052	.265	3.089
Age	.002	1.075	.276	.953
Katz índex	.116	1.154	.752	.918
Physiotherapy	.020	2.167	.499	.638
BMI	.812	.991	.142	.891
Parent hip fracture	.015	.355	.196	.322
Current smoking	.453	.615	.394	.417
Corticotherapy	.013	.404	.639	.637
Rheumatoid arthritis	.071	2.848	.798	1.410
Secondary osteoporosis	.172	.566	.154	.321
Alcohol intake	.037	.370	.980	348544.658
Charlson índex	.000	1.384	.835	.941
Number of re-fractures	.660	.781		
Anti-osteoporotic treatment			.430	.474

Background: Osteoporosis is a major health problem, particularly in the elderly, because of fragility fractures and their consequences. Hip fractures (HF) are the most ominous in terms of morbi-mortality.

Objective: The aim of our work was to establish the current mortality and re-fracture rate at 1 and 3 years after HF, as well as their predictors.

Material and Methods: The study included all patients aged >40 years, admitted to Coimbra University Hospital between May and October 2013 with the diagnosis of HF. Demographic and clinical data related to the fracture episode was collected from medical files. Patients or the caregiver were contacted to assess potential risk factors at baseline and major post-fracture events at 1 and 3 years after the index HF. The mortality and re-fracture rate 1 and 3 years after fracture were calculated. Possible predictor variables were tested by cox regression analysis: age, gender, physiotherapy, number of re-fractures, BMI, parent hip fracture, current smoking, corticotherapy, rheumatoid arthritis, secondary osteoporosis, alcohol, history of falls, anti-osteoporotic treatment, Katz index of independence in

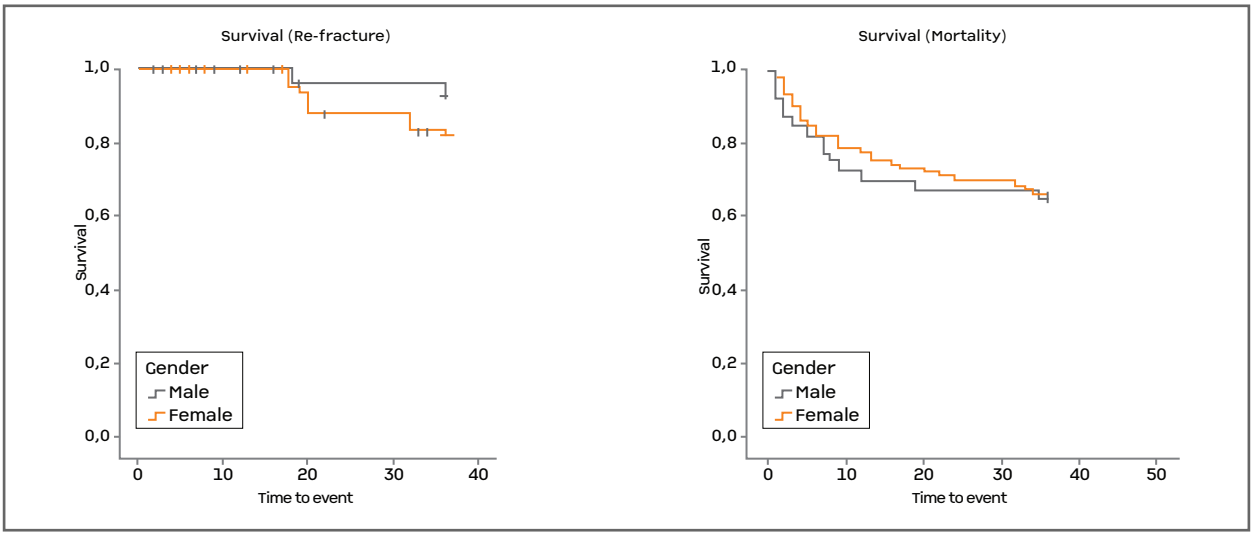

FIGURE. Survival curve - mortality and refrature

activities of daily living and Charlson comorbidity index. All FRAX® variables were defined as established in this algorithm.

Results: A total of 130 patients satisfied the inclusion criteria, with a mean age of 82±8,7 years, 69% being female). Mortality rates were of 30% and 41% at 1 and 3 years after HF respectively. Age, physiotherapy, parent fractured hip, corticotherapy, alcohol consumption (> 3/day) and Charlson índex were statistically significant predictors of mortality at 3 years in multivariable analysis (Tab.1). Re-fracture rates at 1 and 3 years after the index fracture was 3,8% and 11% respectively. We were unable to identify any statistically significant predictors of re-fracture.

Conclusion: We concluded that HF have a great impact on the older population, leading to high morbidity and mortality. In our study, age, physiotherapy, parent hip fracture, corticotherapy, alcohol consumption and Charlson índex are related with increasing mortality in patients who suffered a fagility HF.

P67 – ANXIETY AND DEPRESSION ON DISEASE ACTIVITY AND QUALITY OF LIFE OF SPONDYLOARTHRITIS PATIENTS UNDER BIOLOGIC THERAPIES

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Background: Several studies describe an association between anxiety, depression and disease activity in Spondyloarthritis (SpA).

Objectives: To assess disease activity and quality of life in anxious and depressed SpA patients.

Methods: Observational, retrospective, cross-sectional study of SpA patients on bDMARDs, registered at Reuma.pt, Portuguese Rheumatology registry, with ≥1 clinical evaluation from November 2015 to July 2016.

The following demographic and clinical outcomes were collected: BASDAI, BASMI, BASFI, ASDAS, DAS 28-3V ESR in peripheral psoriatic arthritis, tender and swollen 44 joints count (TJC, SJC), patients' pain and global assessments, physician's global assessment, CRP,

TABLE. COMPARISON OF ANXIOUS VS NON-ANXIOUS AND DEPRESSIVE VS NON-DEPRESSIVE PATIENTS

	HADS-A <8	HADS-A ≥8	p-value	HADS-D <8	HADS-D ≥8	p-value
Current age, mean±SD (years)	48.9±11.9	52.6±10.8	0.045	49.2±11.4	53.2±11.5	0.072
Age at diagnosis, mean±SD (years)	34.3±11.9	40.2±11.5	0.004	34.9±11.5	40.9±12.5	0.015
Age at 1st bDMARD, mean±SD (years)	44.0±11.9	48.7±10.64	0.013	44.7±11.5	48.7±11.6	0.059
HADS-A, mean±SD	3.2±2.1	10.2±2.1	–	4.5±3.4	9.7±3.1	<0.001
HADS-D, mean±SD	2.9±3.3	8.3±2.7	<0.001	2.98±2.5	10.3±2.3	–
ASQoL, mean±SD	3.12±3.8	10.6±4.5	<0.001	4.6±4.7	9.63±5.8	<0.001
BASMI, mean±SD	3.1±1.8	3.9±1.6	0.003	3.2±1.7	3.9±1.6	0.016
BASFI, mean±SD	1.7±1.6	4.1±2.3	<0.001	2.0±1.7	4.3±2.6	<0.001
BASDAI, mean±SD	1.98±1.6	4.5±2.1	<0.001	2.4±1.9	4.5±2.3	<0.001
ASDAS, mean±SD	2.3±1.3	2.6±1.1	0.002	2.3±1.2	2.7±1.2	0.006
Patients' pain assessment (VAS), mean±SD	23.96±21.8	41.2±22.1	0.020	29.1±23.3	38.2±23.0	0.226
Patient's global assessment (VAS), mean±SD	19.1±19.9	42.8±23.1	<0.001	22.9±21.6	42.6±24.5	<0.001
Physician's global assessment (VAS), mean±SD	10.6±12.9	20.1±16.8	<0.001	10.8±12.4	23.95±17.8	<0.001
TJC, mean±SD	1.4±4.2	4.3±9.99	0.002	1.79±5.3	4.45±10.3	0.002
FACIT-F, mean±SD	42.4±7.8	29.5±8.2	<0.001	40.4±8.6	29.3±9.5	<0.001
EQ5D, mean±SD	0.51±0.11	0.29±0.19	<0.001	0.48±0.13	0.28±0.23	<0.001

ESR, ASQoL, EQ-5D, FACIT-F for fatigue and HADS scale with 2 domains, HADS-A for anxiety and HADS-D for depression (a cutoff of 8 defining these symptoms). Statistics: Mann-Whitney test, $p<0.05$. SPSS® v.17.

Results: 160 patients were included, 41.9% were male, with mean: current age 50.7±11.9, age at diagnosis 36.9±11.96, at 1st bDMARD 46.2±11.8, time from diagnosis 18.5±10.3, years. The mean DAS 28-3V ESR was 3.2±1.4, BASDAI 2.98±2.2, ASDAS 2.4±1.2, BASFI 2.68±2.26, BASMI 3.36±1.7, patient's global assessment 28.8±24.1, physician's global assessment 14.5±15.2, ESR 18.8±18.1 mm/h, CRP 6.7±16.01 mg/L, ASQoL 6.2±5.6, FACIT-F 37.2±10.1 and EQ-5D 0.417±0.19. The mean HADS-A was 5.96±4.01 and HADS-D was 5.05±4.1 (HADS-A≥8 in 39.5% and HADS-D≥8 in 28.3% patients). Comparison of anxious *vs* non-anxious and depressive *vs* non-depressive groups appears on table 1.

Conclusions: These results suggest that anxious and depressed patients may have higher disease activity, more functional limitations and worse quality of life. These symptoms should not be underestimated, but instead, they should be controlled to achieve clinical improvement.

P21 – ACPA SEROPOSITIVITY AND PERIPHERAL NATURAL KILLER CELLS AS PREDICTIVE MARKERS OF CLINICAL RESPONSE TO RITUXIMAB IN RHEUMATOID ARTHRITIS PATIENTS

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Background: The efficacy of B cell-depletion therapy confirms the importance of B lymphocytes in rheumatoid arthritis's (RA) pathogenesis. Rheumatoid factor (RF) and anti-citrullinated peptide antibodies (ACPA) are prognostic factors for a more severe disease. Others immune elements, namely natural killer (NK) cells, seems to influence RA clinical response to rituximab (RTX), but data are lacking.

Objectives: To analyze the influence of baseline status/levels of RF, ACPA and serum immunoglobulin G (IgG) level in RTX treatment. To study the effect of RTX on NK and CD19+ cells in RA patients and their association with clinical response at 6, 12 and 18 months (M).

Methods: An observational retrospective study was conducted, including all the consecutive patients with diagnosis of RA under rituximab, followed at our Rheumatology department. Demographic and clinical data were obtained by consulting the national database (Reuma.pt) and the analysis was limited until december 2016. RF, ACPA and IgG titres were evaluated at baseline. NK (CD56+CD16+) and B lymphocytes (CD19+) absolute counts were assessed by flow cytometry prior to the first RTX cycle and 6 M after. Clinical responses were assessed by DAS28 and EULAR criteria at 6, 12 and 18 M. Correlations were studied using Spearman coefficient analysis (SPSS 20.0). Significance level was set as 0.05.

Results: We included 63 RA patients (81% of women), with a mean (SD) age of 61(10) years and a mean disease duration of 19(10) years, 86% RF-positive and 87% ACPA-positive. Bone erosions were present in 86% of the patients. At baseline, the mean DAS28 was 5.79(1.55). Combination therapy with methotrexate or with others cDMARDs was used in 48% and 30% of the patients, respectively; RTX monotherapy in 22% of our sample. Thirty three patients were previously exposed to other biologics. The magnitude of response was greater in ACPA-positive *vs* ACPA-negative patients in terms of DAS28 variation at 6, 12 and 18M (medians of 1.09 *vs* -0.08; 2.03 *vs* 0.35 and 2.10 *vs* 0.19; p=0.029, p=0.039 and p=0.004, respectively), without significant differences between groups in terms of initial DAS28 (5.91(1.60) *vs* 5.00(0.90), p=0.051). The presence of ACPA was also significantly associated with EULAR response at 6, 12 and 18 M (64%, 75% and 85% in ACPA-positive patients *vs* 25%, 16% and 25% in ACPA-negative patients; p=0.034, p=0.010 and p=0.001, respectively). Outcomes did not differ according FR status. There were no associations between the values of FR, ACPA and IgG at baseline with the clinical response (DAS28 variation). CD19+ cells depletion occurred in all patients (mean of 146.4/mm3 at baseline *vs* 10.6/mm3 at 6M). An increase of peripheral NK cells was seen at 6M (mean 231mm/3 at baseline *vs* 289/mm3 at 6 M). We only have found a positive correlation between NK cells number at baseline and DAS28 variation at 6 M (r=0.35, p=0.023). There were no associations between, neither NK cells, nor CD19 cells variations at 6M with clinical response to RTX.

Conclusions: Our data suggest that ACPA seropositivity is associated with a better clinical response to RTX in RA patients. NK cells at baseline may be useful to identify early responders to RTX.

P69 – REAL WORLD DATA OF RITUXIMAB EFFECTIVENESS IN RHEUMATOID ARTHRITIS: DIFFERENCES BETWEEN BIOLOGIC-NAIVE PATIENTS AND PREVIOUSLY EXPOSED TO BIOLOGICS

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Background: Rituximab is only approved for rheumatoid arthritis (RA) treatment in patients with an incomplete response or intolerance to others DMARDs, including TNF alfa inhibitors. It represents a significant advance in RA biologics arsenal due to its safety and efficacy profiles.
Objectives: To evaluate the effectiveness of rituximab in RA patients and to compare the response between first-line rituximab patients and those previously exposed to other biologics.
Methods: An observational retrospective study was conducted, including all the consecutive patients with diagnosis of RA under rituximab, followed at our Rheumatology department until December 2016. Demographic and clinical data were obtained by consulting the national database (Reuma.pt). DAS28 variations and EULAR response were measured at 6, 12 and 18 months. Parametric and non parametric tests were used for statistics (SPSS 20.0).
Results: We included 63 RA patients (81% of women), with a mean (SD) age of 61(10) years and a mean disease duration of 19(10) years; 86% rheumatoid factor positive and 87% anti- citrullinated peptide antibody (ACPA) positive. Bone erosions and extraarticular manifestations were present in 85,7% and 58,7% of the patients, respectively. At baseline, the mean DAS28 was 5.79 (65% and 29% of patients with severe and moderate disease activity, respectively, and 6% in clinical remission). Thirty patients were treated with rituximab as first-line therapy and 33 patients were previously exposed to other biologics. Combination therapy with methotrexate (MTX) was observed in 48 % and with others classic DMARDs in 30%, while 22,3% received rituximab monotherapy. First-line rituximab option was justified by lung involvement in 21%, past malignancy in 13%, recurrent infections in 5%, congestive cardiac failure in 3%, vascular involvement in 3% and untreated latent tuberculosis in 3%. In the group previously exposed to biologics, 13% switched therapy due to ineffectiveness and 87% due to adverse events. No significant differences were found between the 2 groups in terms of age, gender, concomitant use of MTX and baseline DAS28. The group previously exposed to biologics had a longer disease duration (mean 23 *vs* 15 years, p=0.001) and fewer patients with ACPA seropositivity (79% *vs* 97%,p=0.035). There was a significant reduction of DAS28 at 6, 12 and 18 months (p<0.001 for all). Fifty six percent of the patients achieved a EULAR response at 6 months, 46% at 12 months and 59% at 18 months. DAS28 variation at 6 months differed significantly between groups, with a better clinical response in naive biological patients comparing to those previously exposed to biologics (median 1.173 *vs* 0.477; p=0.038). There were no differences in terms of DAS28 variation at 12 and 18 months (p=0.642 and p=0.135, respectively) and in EULAR responses at 6, 12 and 18 months between the groups (p=0.289, p=0.523 and p=1.000,respectively).
Conclusions: Our study confirms the effectiveness of rituximab in RA patients and suggests a higher magnitude of response in naive biological patients at 6 months of RTX therapy. These findings put in perspective an extension of rituximab as a first-line biologic for RA treatment.

GRUPO 6

P159 – COMPARATIVE EFFECTIVENESS OF SWITCHING TO ALTERNATIVE TUMOUR NECROSIS FACTOR (TNF) ANTAGONISTS VERSUS SWITCHING TO RITUXIMAB IN PATIENTS WITH RHEUMATOID ARTHRITIS WHO FAILED PREVIOUS TNF INHIBITORS

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Background: Tumour necrosis factor inhibititors (TNFi) and B-cell depletion are highly effective treatments for active RA. Following an inadequate response to a prior TNFi, using RTX would be clinically non-inferior, cheaper and with a comparable safety profile[1].
Objectives: To compare the effectiveness and safety of RTX therapy versus TNFi in RA patients, who failed to

respond to a previous TNFi, followed in a rheumatology unit.
Methods: Retrospective study of 33 RA patients non-responsive or intolerant to a TNFi, registered in the Rheumatic Diseases Portuguese Register, who have switched from a 1st TNFi to a 2nd TNFi or to RTX. We assessed disease activity at baseline, 6 and 12 months, according to disease activity score-28 joints (DAS28), clinical disease activity index (CDAI) and simplified disease activity index (SDAI). Discontinuation rates and respective reasons were evaluated. Parametric and non-parametric tests were used for comparative analysis. P value <0.05 was defined as statistically significant.
Results: 33 patients, 29 females (87.8%), with a mean age of 56.6 (±10.7) years and mean disease duration of 14.7 (±3,9) years were evaluated. Patients were divided in two groups, whether they switched for TNFi (58.8%) or RTX (42.2%). Disease activity was slightly higher in the RTX group, respectively: DAS28 5.37 *vs* 5.79, CDAI 28.58 *vs* 33.56 and SDAI 30.99 *vs* 35.67 (p>0.05 for all). Similar results were also found about tender joint count-28 (TJC), swollen joint count-28 (SJC), patient and physician global health. In opposition C-reactive protein (CPR) and erythrocyte sedimentation rate (ESR) were lower in RTX group, but all of them without significant differences. At 6 months, DAS 28 and SDAI were lower in the TNFi group (p=0.04 and 0.03). However, comparing groups at 12 months, there were no significant differences for all parameters. The variation of units in DAS28 between baseline and 6 or 12 months, was 1.65 *vs* 1.03 and 1.91 *vs* 1.75 units (p>0.05), respectively for TNFi *vs* RTX groups. Remission, according to the DAS28 (<2.6), CDAI (≤2.8) and SDAI (≤3.3) was achieved in 15% of patients treated with TNFi, at 6 months, but in none of the RTX group (p>0.05). However, at 12 months, the remission rates were higher in patients treated with RTX, with a proportion of patients achieving DAS28 and CDAI/SDAI remission of 20.01% and 13.03% in TNFi group, while in RTX group it was 23.10% and 15.41%, respectively, with p>0.05 for all. At 1 year, the treatment was discontinued only in the TNFi group, representing 21.05% of patients. The ineffectiveness of therapy was the main reason, while adverse events and lost to follow up represented a lower proportion.
Conclusions: Our findings showed a higher effectiveness for TNFi at 6 months, but not at 12 months, comparing with RTX treatment which may be related with the known delay of mechanism of action of the latter. The group of patients treated with RTX had slightly higher level of disease activity at baseline and it may reflect a selection bias for a severely resistant population of patients that respond poorly to biologics. Larger studies, with more patients and longer follow-up are warranted.

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P18 – QUALITY OF LIFE IN PATIENTS WITH BEHCET'S DISEASE

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Background: Behcet's disease (BD) is a chronic and multisystemic inflammatory disorder affecting the skin, mucosa, joints, eyes, arteries, veins and the nervous and gastrointestinal systems. The symptoms may be separated by long or short intervals, occur simultaneously or in sequence, and exhibit a pattern of exacerbation and remission. The disease itself or the impact of the symptoms affect patients physically, mentally and socially with a negative effect in the quality of life (QoL).
Objectives: To determine the health status and quality of life in patients with BD followed in a rheumatology unit and to identify associated demographic and disease-related parameters influencing them.
Methods: Cross-sectional study of 44 BD patients and 39 healthy controls matched for age and sex. All subjects completed the Health Assessment Questionnaire (HAQ) to assess impairment in daily activities due to illness, Short Form-36 (SF-36) and EuroQol Visual Analogic Scale (EQ-VAS) to assess health related quality of life (HRQL). The disease characteristics, including disease duration and clinical involvements were collected. The Birmingham Vasculitis Activity Score (BVAS) was applied for the evaluation of current disease activity among BD patients. Parametric and nonparametric tests were used for comparative analysis. P value <0.05 was defined as statistically significant.
Results: Among 44 patients, 35 (79.5%) were female,

with a mean age of 40.07 years and mean disease duration of 5.93 years. BD patients had significantly higher HAQ score (p=0.009) and lower levels of SF-36 (p<0.001) than the healthy controls. The predominant contributors to this low SF-36 score were general health, vitality and role-emotional domains. In comparison with healthy controls, patients with inactive disease (BVAS=0) also had a higher HAQ, but without significant differences (p=0.53). The total SF-36 score also showed lower levels in patients with inactive disease (p=0.04), but when compared the different components, only half of them maintained significant differences, namely role-physical (p=0.03), general health (p<0.001), vitality (p<0,001) and social functioning (p=0.05). The controls showed a higher EQ-VAS, with a mean of 88.44 comparing to 68.36 in all BD patients (p<0.001) and 74.12 in the subgroup with inactive disease (p=0.003). SF-36 score was negatively correlated with HAQ (r=-,553, p<0.001) and positively correlated with EQ-VAS (r=.388, p<0.001). Longer disease duration correlated with lower levels of only some SF-36 domains, namely physical functioning (r=-.436, p=0.003), role-physical (r=-.533, p<0.001) and role--emotional (r=-.465, p=0.001). There was no correlation between disease activity and disease duration (p=0.678) or different scores evaluating QoL (p=0.876). The gender was not associated with statistical differences when compared clinical involvements, disease duration, current disease activity, HAQ, EQ-VAS or SF-36 scores. The heterogeneous nature of the disease expression did not allow the study of the association with the levels of health status and QoL.

Conclusions: Our findings showed lower levels of QoL and global health status in BD compared to healthy controls, mainly in active disease, accordingly with previous studies. The disease itself could be a determinant of disability. To recognize these difficulties and coexisting conditions is important to better manage these patients.

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P189 – CERTOLIZUMAB PEGOL-LIKE PRODUCT MICE EQUIVALENT REDUCES PAWS INFLAMMATION IN TMTNF TRANSGENIC MICE

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Background: Transmembrane (tm)TNF (TgA86) mice is a transgenic line that spontaneously develops peripheral arthritis and spondylitis, with 100% penetrance, mimicking human spondyloarthritis (SpA). Arthritis is characterized by swelling and deformation of the paws and toes with loss of grip, and spondylitis by crinkled tail and hunchback deformation, starting at 4 weeks of age. The aim of this work is to understand the effect of TNF blockade in this SpA-like phenotype mouse strain.

Methods: (tm)TNF (TgA86) mice were bred in specific-pathogen-free conditions and according to human endpoints. (tm)TNF (TgA86) mice at 10 weeks of age were treated with a certolizumab pegol-like product mice equivalent (Ab501) or with vehicle (phosphate buffer saline), for 12 weeks. Ab501 was administered 100mg/kg twice a week intraperitoneal.

The arthritic paw inflammatory score according to the European Guidelines for Animal Experimentation was used. A semi-quantitative score for the severity of histologic inflammation was applied to haematoxylin and eosin stained slides (global, infiltration, lining cells and erosions). Results were analyzed using Mann--Whitney test. p values less than 0.05 were considered statistically significant.

Results: 14 (tm)TNF (TgA86) mice (6 males and 8 females) at 10 weeks of age were treated with Ab501 and 6 (tm)TNF (TgA86) mice with vehicle, for 12 weeks. A significant lower paws inflammatory score was observed in Ab501 treated animals as compared to vehicle treated animals. Mice weight progressively increased through follow-up, showing a trend for higher gains in the Ab501 treated group in comparison to the vehicle group. Significant differences between groups were observed in the global inflammatory score both in the front (p=0.001) and hind paws (p=0.0086). The analysis of partial scores showed significantly lower inflammatory infiltrate in the front paws (p=0.001) and hind paws (p=0.001), as well as less lining cells layers (respectively, p=0.0331 and p=0.0051), in the Ab501 treated group as compared to the vehicle group. Significant (p=0.0014) lower erosion score at the front paws was also observed in the Ab501 treated group, comparing to the vehicle group.

Conclusions: The certolizumab pegol like product mice equivalent prevented macroscopic and histologic inflammatory infiltrate and lining layers thickening in both front and hind paws of (tm)TNF (TgA86) mice. Erosive disease was also significantly delayed in the front paws. These are preliminary results concerning the effect of certolizumab pegol-like product mice equivalent in peripheral arthritis of (tm) TNF (TgA86) mice.

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P214 – EXISTE DESREGULAÇÃO IMUNITÁRIA NA SÍNDROME SICCA NÃO-SJÖGREN? UM ESTUDO DAS SUBPOPULAÇÕES LINFOCITÁRIAS CIRCULANTES

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Introdução: Um grande número de doentes com síndrome sicca não preenche critérios de classificação da síndrome de Sjögren (SS), mas apresenta manifestações de autoimunidade, como artrite, fenómeno de Raynaud, alterações cutâneas ou hematológicas. Estes doentes têm anticorpos anti-nucleares, estando ausentes auto-anticorpos mais específicos, e são designados como Doença Indiferenciada do Tecido Conjuntivo (DITC). Alguns poderão progredir para uma doença específica, sendo a SS uma forte candidata. Distúrbios das populações linfocitárias podem ser um marcador de progressão, uma vez que doenças como a SS têm perfis linfocitários distintos.

Objectivos:. Pretendeu-se estudar a distribuição das populações linfocitárias circulantes em doentes com síndrome sicca não-Sjögren (n-SS) e compará-los com SS e controlos saudáveis.

Métodos: Incluímos 65 doentes n-SS, 53 doentes SS (critérios AECG) e 22 controlos saudáveis. As subpopulações linfocitárias foram caraterizadas por citometria de fluxo, incluindo as células T foliculares e reguladores, as células B naïve, maduras, de memória, plasmablastos e B reguladoras. A análise estatística foi realizada com GraphPad, com significância para $p<0,05$.

Resultados: Em relação ao grupo controlo, os doentes n-SS tinham contagens de células T mais baixas ($p=0,016$), com CD4 mais baixos ($p=0,0028$), embora essa diferença não seja tão pronunciada como entre SS e controlos. Doentes n-SS tinham percentagens mais elevadas de CD4 ($p=0,0005$) e mais baixas de CD8 ($p=0,0009$) que os doentes SS. Adicionalmente, constatou-se uma diminuição na contagem absoluta de Tregs ($p=0,0028$) em doentes n-SS comparados com o grupo controlo, mas que foi menos pronunciada que na comparação entre doentes SS e controlos ($p=0,0008$). As células Th17 estavam diminuídas em doentes com SS comparados com controlos ($p=0,0005$), mas não em doentes n-SS. Comparando com controlos, os doentes n-SS e SS apresentavam ambos uma contagem absoluta diminuída ($p=0,0001$ and $p<0,0001$, respetivamente) de células Tfh CXCR5+, sem diferenças entre doentes n-SS e SS. No entanto, encontraram-se números mais elevados de células T IL21+CD4 e células Tfh1 nos doentes SS em comparação com os controlos ($p=0,0209$ and $p=0,0092$ respectivamente) e doentes n-SS ($p=0,0051$ and $0,0028$ respectivamente).

Doentes n-SS apresentavam contagens absolutas de células de memória (com *switch* e sem *switch)* em níveis intermédios entre os controlos (com valores significativamente mais elevados) e os doentes SS (com valores significativamente mais baixos). Usando a classificação Bm1-5, encontrámos níveis mais baixos de células Bm1 ($p=0,004$), eBm5 (Abs, $p=0,0273$) e células Bm5 (Abs, $p=0,0444$) em doentes n-SS comparados com controlos. Embora sem significância estatística, encontrou-se um aumento das células eBm5 (Abs, $p=0,063$) e Bm5 (Abs, $p=0,05$) em doentes n-SS em comparação com doentes SS. As células Breg CD24+CD27+ também estavam diminuídas em doentes n-SS comparados com controlos ($p=0,036$), mas aumentadas em doentes n-SS comparado com doentes SS ($p=0,0007$).

Conclusões: Os doentes n-SS apresentaram desregulação imunitária, representada por alterações nas células B mas também no subgrupo das células Tfh, co-

nhecidas por modular a resposta imunitária humural. Apesar de menos pronunciadas, estas alterações assemelham-se às encontradas em doentes SS. Permanece por esclarecer se a síndrome sicca n-SS é uma fase na evolução para SS. No entanto, a identificação de uma desregulação imunológica característica em doentes n-SS pode ser útil para o diagnóstico e prognóstico.

P173 – OSTEOARTHRITIS MULTIDISCIPLINARY CLINIC – 2 YEARS OF EXPERIENCE

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Background: There is an increasing demand to have a coordinated pharmacological and non-pharmacological approach in order to boost osteoarthritis (OA) treatment effectiveness. The OA multidisciplinary Clinic in HSEIT started in 2014 and aimed to improve pain, function and delay the placement of total joint replacement in OA patients. The team consists of elements of Rheumatology, Orthopaedics, Physiatrist, Nutrition and Podology.

This study aims to characterize the population evaluated in OA Multidisciplinary Clinic and to evaluate patient's level of satisfaction.

Methods: Patients that attended the OA multidisciplinary Clinic in HSEIT between February 2014 and November 2016 were evaluated. After the first visit a personalized multidisciplinary approach was applied to each individual patient that can include physical therapy, nutrition program, intra-articular administration of hyaluronic acid and/or corticosteroid and orthotics. The second visit happens after 6 months of follow-up. Clinical diagnosis, radiographic severity score of knee and hip OA (Kellgren Lawrence), Knee injury and OA outcome score (KOOS), pain visual analogic scale (VAS), pharmacological treatment and body mass index (BMI) were retrospectively collected using patient's clinical process. Patient's clinical data were assessed at the first visit and after 6 month of follow-up. Moreover, an independent researcher through a phone interview performed a Patient satisfaction survey in December 2016.

Results: 64 consultations were identified for a total of 45 patients. The majority of the evaluated individuals were female (81.8%) and had a mean age of 60.8±10.8 years. About half of the patients had knee OA (52.3%), 11.4% ankle OA and 36.4% others. Regarding Knee and hip OA 78.6% had a radiographic severity score of 4.

In the first visit 100% of the patients reported daily analgesic therapy intake. After 6 months of follow-up the proportion of patients with daily use of analgesic intake decrease to 58.1%. Moreover, a decrease in pain VAS was also verified from 8.2±2.7cm at the first visit to 7.0±3.0 cm at the second visit.

At the first visit 100% of patients were obese. Of the 17 patients that accepted the nutrition program, 88.2% had lost weight, with decreased in the mean BMI from 42.1±7.1 in the first visit to 39.3±5.0.

Considering physical therapy 56.8% were proposed to treatment. Orthopaedic surgery was proposed in 56.8% of the patients, with 84%on the waiting list.

In patients with knee OA an improvement in the mean score in all subsets of the KOOS questionnaire was observed. The mean Symptoms subset at baseline was of 33.2±20.8 and at 6 month of follow-up was of 50.9±28.4; the mean Pain subset 30.4±17.3 and 58.5±25.0 and in Daily Life Activities 30.3±14.1 and 56.2±20. These differences verified in the KOOS are considered above the minimal Detectable Changes as defined by the: International Knee Documentation Committee.

In the satisfaction survey, on a scale of 0 to 10, patients classified the Multidisciplinary OA treatment approach on average 8.5±2.7 in relation to importance and 8.9±2.2 in relation to satisfaction. Of the patients submitted to surgery (n=4) all rated their satisfaction with the results on 10/10.

Conclusion: The population evaluated in the OA Multidisciplinary Clinic had a severe OA, were obese, very symptomatic and with severe physical limitation. After the personalized multidisciplinary therapeutic plan, clinical improvement of pain, function and BMI was observed. Patients report high degrees of satisfaction with the consultations and treatments instituted

P146 – ARE RHEUMATOID FACTOR ISOTYPES USEFUL IN THE DIAGNOSIS OF RHEUMATOID ARTHRITIS?

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Introduction: Rheumatoid factor (RF) and anti-citrullinated peptide antibodies (ACPA) are key serologic markers in the diagnosis of Rheumatoid Arthritis (RA) included in the 2010 ACR/EULAR diagnostic criteria. Determination by enzyme-linked immunosorbent assay (ELISA) allows RF isotypes' quantification (IgG, IgA and IgM), improving diagnostic accuracy.
Objectives: To assess the clinical value of RF-IgG/IgA/IgM (ELISA) in the diagnosis of RA, in comparison to RF-IgM (nephelometry).
Methods: A population of RA outpatients fulfilling the 2010 ACR/EULAR diagnostic criteria was cross-sectionally evaluated. Data on demographic and clinical characteristics was collected. RF-IgG/IgA/IgM (ELISA, Orgentec), RF-IgM (nephelometry, Siemens) and ACPA-IgG (ELiA, ThermoFisher) were measured. Values three times or more above the upper limit of normal were considered high-positive (in agreement to 2010 ACR/EULAR diagnostic criteria).
Results: A total of 87 patients (70.1% female) were included, with a mean (SD) age of 57.3 (12.29) years. Median time of disease evolution was 6 years, ranging from 0 to 37 years. Erosions were present in 50.6% (N=44). RF-ELISA was positive (at least one isotype increased) in 85.1% (N=74); the most frequent isotype was IgM (70.1%;N=61) and the most frequent combination was IgG, IgA and IgM positivity (46.0%;N=40) (table1). FR-nephelometry and ACPA were positive in 58.6% (N=51) and 47.1% (N=41), respectively.

TABLE I. FREQUENCIES OF RF-ELISA ISOTYPES' PROFILES

Profile	n	%
IgG-IgA-IgM-	13	14,9
IgG+IgA-IgM-	1	1,1
IgG+IgA+IgM-	4	4,6
IgG+IgA?IgM+	1	1,1
IgG+IgA-IgM+	12	13,8
IgG+IgA+IgM+	40	46,0
IgG-IgA+IgM+	5	5,7
IgG-IgA-IgM+	3	3,4
IgG-IgA+IgM-	8	9,2

Comparing the two RF methods, 56.3% (N=49) were both RF-nephelometry and RF-ELISA positive; 28.7% (N=25) were RF-ELISA positive and RF-nephelometry negative, and only 2.3% (N=2) verified the opposite (p=0.001). As for RF high-positivity, 4.6% (N=4) of the 87 patients were only RF-nephelometry high-positive, 9.2% (N=8) only RF-ELISA high-positive and 34.5% (N=30) both high-positive (p<0.001).

In the RF-nephelometry negative population (N=36), ACPA and RF-ELISA were both positive in 11.1% (N=4). Only 8.3% (N=3) were solely ACPA positive and 58.3% (N=21) solely RF-ELISA positive, however without statistical significance.

Considering the ACPA negative population (N=46), 32.6% (N=15) were both RF positive; 45.7% (N=21) were RF-ELISA positive and RF-nephelometry negative and 4.3% (N=2) the opposite, without a statistical significance.
Conclusions: ELISA is superior to nephelometry detecting RF in patients with RA, as also in quantifying high-positive values.

P7 – EFFICACY AND SAFETY OF ORAL ADMINISTRATION OF PURE CELASTROL IN AIA RATS

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Background: Celastrol, a pentacyclic-triterpene isolated from Tripterigium wilfordii roots, has shown great therapeutic potential for the treatment of several inflammatory diseases, including rheumatoid arthritis (RA). We have previously demonstrated that celastrol has significant anti-inflammatory and bone protective effects in the adjuvant-induced rat model of arthritis (AIA), when administered via intraperitoneal route. For further preclinical evaluation of celastrol as a candidate compound for RA treatment, an effective and safe oral

administration is crucial.
Objective: In this work we aimed to study the dose range for both therapeutic and toxic effects for oral administration of pure celastrol using the AIA rat model.
Methods: Celastrol (1, 2.5, 5, 7.5, 12.5 and 25µg/g/ /day, N=5/group) was administrated orally in female AIA rats after 8 days of disease induction (therapeutic model) for a period of 14-days. A group of healthy (N=8) and untreated arthritic (vehicle, N=15) gender and age-matched Wistar rats were used as control. During the period of treatment, the inflammatory score, ankle perimeter and body weight were measured. At the end of the treatment, animals were sacrificed, blood was collected for clinical pathology, and necropsy was performed, with collection of internal organs for histopathological analysis and of paw samples for disease scoring.
Results: Oral administration of pure celastrol at 2.5, 5 and 7.5µg/g/day reduced the inflammatory score and ankle swelling, preserved articular joint structure with a reduction in synovial inflammatory infiltrates and proliferation, halted articular bone destruction, and diminished the number of synovial CD68+ macrophages (a biomarker of response to anti-arthritic treatment). This compound also reduced the number of osteoclasts and osteoblasts present in joints. Bone resorption and turnover was also reduced at both 5 and 7.5µg/g/day, with a significant decrease in serum levels of TRACP--5b, P1NP and CTX-I. Of note, no significant variation in body weight, evidence of nephro-, hepato- or cardiotoxic effects, nor alterations in blood cell counts were observed at these concentrations. However, the dose of 7.5µg/g/day was already associated with thymic and hepatotoxic changes, and higher doses showed toxicity signs. The lethal dose (LD) and LD50 were defined as 25µg/g/day and 12.5µg/g/day, respectively. Of note, oral celastrol at 1µg/g/day had no effect in arthritis progression.
Conclusion: Our results clearly show that 2.5µg/g/day is the lowest and 5µg/g/day is the highest effective and safe oral doses of celastrol in the setting of AIA rat model. These findings suggest that while celastrol is potentially very effective to treat RA, it has a narrow therapeutic window.

P111 – MULTIDISCIPLINARY SJÖGREN'S SYNDROME CLINIC: CHARACTERIZATION AND IMPACT AT THE CLINICAL AND RESEARCH LEVEL

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Introduction: Sjögren's syndrome (SS) is an inflammatory rheumatic disease that can affect several organ systems, most frequently the musculoskeletal, ocular and oral domains. Multidisciplinary care is thus crucial in the optimal management of SS patients. Recently, the Rheumatology, Stomatology and Ophthalmology departments of our center joined efforts to create a multidisciplinary SS (MDSS) clinic aiming to improve patient care and facilitate clinical research.
Objectives: Our goal is to report the aims, structure and characteristics of the MDSS clinic. We will also summarize the characteristics of the patients evaluated since its creation in mid 2016.
Methods: We reviewed the procedures conducted at the MDSS clinic, including clinical evaluation, disease--related questionnaires, specialized oral/ocular assessment, biologic samples collection, patient education and clinical research efforts. We reviewed the clinical files of patients assessed to date for diagnosis, classification criteria, salivary gland biopsy and ultrasound, tear and salivary flow and ocular staining scores.
Results: The main aims of the MDSS clinic are: to provide optimal care to SS patients through a thorough, fast, coordinated, systematic evaluation of the rheumatological, oral and ophthalmologic domains; to facilitate the diagnostic investigation of sicca syndromes or clarification of specific issues in patients with established diagnosis; to promote clinical research in the field of primary SS, through the constitution of a prospective cohort with an associated Biobank collection. Patients are referred by other physicians from the three departments involved in the MDSS clinic and undergo full clinical evaluation, with clinical history and complementary exams review, classification criteria (AECG 2002 and ACR/SICCA 2012) evaluation, assessment of disease activity (ESSDAI, ESSPRI, PROFAD-SSI) and damage (SSDI, SSDDI), as well as full

TABLE I. CHARACTERIZATION OF PATIENTS OBSERVED AT THE MDSS CLINIC

Age	56.4±11.8 years
Female	69 (98.6%)
Primary Sjögren's Syndrome	45 (64.3%)
Secondary Sjögren's Syndrome	7 (10.0%)
Non-Sjögren Sicca Syndrome	18 (25.7%)
AECG 2002 criteria (SS only)	38/52 (73.1%)
Positive SG biopsy (≥1 focus*/4mm^2)	18/50 (36.0%)
Positive SG Ultrasound (≥grade 2/4)	17/38 (44.7%)
Unstimulated salivary flow <0.1ml/min	30/70 (42.9%)
Positive Schirmer's I Test	28/61 (45.9%)
Positive Van Bijsterveld dry eye score	19/60 (31.7%)
Positive SICCA Ocular Staining Score	23/46 (50.0%)

*Considered as an aggregate with at least 50 lymphocytes. AECG, American European Consensus Group; SICCA, Sjögren's International Collaborative Clinical Alliance; SG, salivary gland

oral and ophthalmological evaluation focusing on dryness extent, oral/ocular damage, tear/salivary flow and other concomitant eye and mouth conditions affecting these patients. All patients have an unstimulated salivary flow assessment, Schirmer's I Test and ocular staining for keratoconjunctivitis sicca according to validated scores. Patients are also checked for prior salivary gland biopsy and ultrasound and offered one when not previously done. On patient's agreement, saliva and blood is collected for the SS Biobank-IMM collection, with paired clinical information being registered in the SS module of the Rheumatic Diseases Portuguese Register, Reuma.pt. A final diagnosis is established, therapeutic measures are instituted, medication is adjusted and follow-up of specific active problems is planned. Patients are referred back to their assisting physicians and re-evaluated in the MDSS clinic every 6 to 12 months. Patients with primary SS are included in the Observational Lisbon Sjögren's Syndrome Prospective Observational (OLISSYPO) Cohort, with paired clinical data (Reuma.pt) and biological samples (Biobank-IMM). Since May 2016, 70 patients were evaluated in the MDSS clinic, with the corresponding data represented in Table 1.

Conclusions: The creation of the MDSS clinic has added value to the investigation and management of sicca syndrome patients, most importantly those with primary SS. Patients were quickly and easily referred for specialist assessment, thus improving clinical care and outcomes. Research is facilitated by the MDSS clinic, enabling the creation of a thoroughly characterized cohort, with matching biological samples.

GRUPO 7

P27 – LUNG INVOLVEMENT IN RHEUMATOID ARTHRITIS – A PORTUGUESE REALITY

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Background: Rheumatoid arthritis (RA) is associated with a wide range of extra-articular manifestations. Non-cardiac thoracic manifestations occur in approximately 5–20% and can affect the pleura, pulmonary parenchyma, airways and vasculature. Besides, patients can also experience drug-induced pulmonary disease related to RA medication.

Objectives: To characterize lung involvement and factors associated with lung disease in a cohort of RA patients.

Mehods: Retrospective analysis of RA patients followed in our Rheumatology department. Lung involvement was defined by the presence of imagiological/ /histopathological alterations described in the spectrum of rheumatoid arthritis-associated lung disease in either symptomatic or asymptomatic patients. Logistic regression analysis was used to evaluate demographic and clinical features independently associated with lung disease.

Results: In total, 532 RA patients were analysed, 400 females, mean age of 63.6 (±13.8) years and mean disease duration of 11.8 (±9.5) years. Rheumatoid factor (RF) was positive in 69% and anti-cyclic citrullinated peptide antibodies (ACPA) in 60%; 8.8% were current smokers and 7.5% past smokers. Methotrexate (MTX) was the most prescribed synthetic DMARD (85.9%) and biologics were used in 32.3% of patients.

Lung involvement was documented in 38 patients (7.1%; 95% CI 5.2%-9.7%). The specific types of lung disease are presented in table 1. The mean interval between articular and pulmonary symptoms was 6.1 (±6.4) years, with only 1 patient having lung involvement diagnosed prior to joint manifestations. Most patients were female (73.7%), 78.9% RF positive, 68.4% ACPA positive and 29% current/previous smokers. Secondary Sjögren's Syndrome was present in 5 patients.

TABLE 1. SPECIFIC TYPES OF LUNG INVOLVEMENT AND ITS CHARACTERISTICS

Type of lung involvement	UIP (n=10)	NSIP (n=8)	Bronchiectasis (n=16)	Follicular bronchiolitis (n=1)	Pleural involvement (n=3)
Female	7	6	14	1	0
RF positive	8	7 (1 missing)	12 (1 missing)	1	2 (1 missing)
Smoking	4 (1 missing)	3	3	0	1
PFT	4 normal	5 normal	9 normal	1 normal	3 normal
	3 restrictive	1 restrictive	4 restrictive		
	1 obstructive	1 restrictive + obstructive	2 obstructive		
DLCO < 75%	7	3 (2 missing)	7 (3 missing)	0	2

UIP – usual interstitial pneumonia; NSIP – nonsepcific intersticial pneumonia

Eighteen (47%) patients were medicated with MTX, 16 of them initiated therapy before developing respiratory symptoms and 10 (26.5%) with biologics (4 with TNF antagonists, 3 with tocilizumab, 2 with rituximab and 1 with abatacept). Most patients (92.1%) had abnormal chest x-rays, but only 47.4% were symptomatic. Pulmonary function tests (PFT) were abnormal in 31.6% of patients and 47.4% had diffusing capacity for carbon monoxide (DLCO) less than 75% predicted (7 had no DLCO estimated). Respiratory insufficiency was present in 7 (18.4%) patients.

In multivariate logistic regression analysis, current MTX use (OR: 2.1[1.02-4.33]), RF positivity (OR: 3.48[1.18-10.25]) and older age (OR: 1.03[1.00-1.06)] were independently associated with lung involvement. **Conclusions:** Lung involvement was present in 7.3% of our cohort and was diagnosed in average 6.1 years after the first joint manifestations. RF positivity, older age and current MTX use are associated with lung disease.

As most patients remain asymptomatic, lung involvement is probably underdiagnosed in RA patients. Besides, in clinical practice exams that can detect preclinical disease, such as high-resolution chest computed tomography, are usually reserved for symptomatic patients or with an abnormal chest x-ray.

P32 – SÍNDROMA ANTIFOSFOLIPÍDO: REVISÃO DE 52 CASOS DE UM SERVIÇO DE REUMATOLOGIA

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Introdução: O Síndroma Antifosfolipído (SAF) é um distúrbio adquirido associado a autoanticorpos contra os fosfolipídos e complexos de proteínas de ligação. É definido pela presença de dois componentes *major*: 1) ocorrência de pelo menos uma das seguintes manifestações clínicas - trombose (venosa ou arterial) ou morbilidade na gravidez. 2) presença no plasma de pelo menos um tipo de autoanticorpo antifosfolipído (Sapporo *et al,* 2006)

Esta entidade pode ser classificada como primária ou secundária sendo, neste ultimo caso, mais frequentemente associado ao Lúpus Eritematoso Sistémico (LES).

O objetivo deste trabalho foi o de caracterizar demográfica, clínica e laboratorialmente o conjunto de doentes com SAF, seguidos no nosso Serviço de Reumatologia.

Métodos: Avaliação retrospetiva dos processos clínicos, cartas de alta e registos do reuma.pt de doentes seguidos no serviço de Reumatologia entre 2005 e 2017, com o diagnóstico de SAF, segundo os Critérios de Sapporo.

Resultados: Identificaram-se 52 doentes os quais, na sua maioria eram do sexo feminino (88,5%). A idade média ao diagnóstico foi de 35,7 ± 13,24 anos. Cerca de 81% dos casos correspondiam a SAF secundário, sempre associados a LES. 28,8% dos doentes apresentavam SAF primário.

Em relação às manifestações clínicas: 80% dos doen-

tes apresentaram eventos trombóticos, 7,6% complicações na gravidez e 11,5% apresentaram tanto eventos trombóticos como complicações na gravidez. De entre os doentes que apresentaram eventos trombóticos, 61,9% doentes tiveram uma Trombose Venosa Profunda como 1º evento trombótico. 80% das complicações na gravidez ocorreram após as 10 semanas de gestação.

Sob o ponto de vista laboratorial, o anticoagulante lúpico foi identificado em 75% dos doentes, o anti-cardiolipina IgG em 46,2% e IgM em 13,4% e o anti-beta2-glicoproteina I IgG em 40,3% e IgM: 15,4%.

Os fatores de risco cardiovasculares mais frequentemente identificados foram a hipertensão arterial (34,6%) e a dislipidémia (38,5%).

A totalidade dos doentes com eventos trombóticos foram anticoagulados.

Conclusão: Nesta coorte, a maioria dos doentes era do sexo feminino e apresentava SAF secundário (em todos os casos em associação com LES). Os eventos trombóticos vasculares foram a manifestação clínica mais frequente, com destaque para as TVP tanto como primeiro evento, como na globalidade dos eventos trombóticos. As características clínicas e laboratoriais descritas nesta coorte vão de encontro às previamente descritas em outros estudos.

P160 – PERCEPÇÃO DA DOENÇA NUMA CONSULTA DE REUMATOLOGIA

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Introdução: A perceção da doença consiste no conjunto de crenças pessoais dos doentes acerca da sua doença. O reconhecimento destas crenças por parte dos profissionais de saúde pode ajudar na identificação de grupos mais vulneráveis à gestão incorreta da sua patologia e na adequação/otimização das estratégias de comunicação. O *Illness Perception Questionnaire* – Brief (IPQ-B) é um instrumento que tem por objetivo avaliar a perceção da doença nas suas várias vertentes. Encontra-se já validado e adaptado para a população portuguesa[1].

Objectivo: Avaliar o grau de perceção acerca da doença e crenças associadas numa consulta de Reumatologia.

Metodologia: Colheita de dados demográficos e aplicação do IPQ-B a todos os doentes observados consecutivamente na consulta de Reumatologia num período de quatro semanas, excluindo-se os doentes observados pela primeira vez.

Resultados: Foram incluídos 409 doentes. Destes, 273 eram mulheres (66,7%) e 136 eram homens (33,3%), com uma média de idades de 55,5 anos (DP ± 14,81). A maioria dos doentes (53,1%) possuía escolaridade Básica, com 42,1% com formação Secundária ou Superior. Vinte doentes, por serem analfabetos, necessitaram de ajuda na leitura do questionário. A patologia inflamatória foi o grupo nosológico mais representativo (74,3%). A duração média de doença foi de 74,3 meses (DP ± 60,04). Quando questionados acerca da patologia pela qual eram vigiados na consulta, 44,3% dos doentes responderam incorretamente ou não responderam. Quanto ao motivo de seguimento na consulta, a percentagem de resposta correta foi mais elevada entre os doentes mais jovens, do sexo feminino, com patologia inflamatória e com maior grau de diferenciação académica. Na generalidade, os doentes apresentavam-se preocupados com a sua doença, tendendo a percebê-la como de longa duração, mas acreditando no benefício do tratamento. Os indivíduos mais velhos referiam uma influência mais significativa da doença na sua vida, apresentavam mais sintomas e estavam mais preocupados, apesar de demonstrarem maior perceção de autocontrolo sobre a patologia. Independentemente da idade, nos indivíduos com doença inflamatória a perceção da interferência da patologia na sua vida era menor comparativamente aos doentes com patologia não inflamatória, referindo maior controlo sobre a sua doença. Estes mesmos doentes tendiam a acreditar mais no benefício do tratamento, experienciando menos sintomas e um menor impacto emocional.

Discussão/Conclusão: No geral, os doentes não apresentavam um bom nível de compreensão da sua doença. A percentagem de doentes que desconhecia a patologia pela qual se mantinha em vigilância em consulta de Reumatologia é bastante significativa e é algo que os profissionais de saúde deverão trabalhar. As crenças do doente sobre a sua patologia podem ter impacto na adesão ao tratamento e em outros comportamentos de saúde. A desmistificação de conceitos como "cura", "cronicidade", entre outros, e a informação adequada podem influenciar positivamente o estilo de vida dos doentes e, consequentemente, a evolução das doenças.

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P186 – STATUS DA VITAMINA D EM DOENTES COM ARTRITE REUMATÓIDE E CORRELAÇÃO COM A ATIVIDADE DA DOENÇA

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Introdução: A Artrite Reumatoide (AR) é uma doença inflamatória crónica, caracterizada pela perda de auto-tolerância e ativação imune, particularmente, contra os tecidos sinoviais. A sua patogénese permanece em investigação, mas, suscetibilidade genética, fatores ambientais e ativação imunológica serão preponderantes. A vitamina D poderá ser um dos fatores ambientais relacionado com a AR. Os estudos sobre os seus efeitos imuno-modulatórios e a descoberta de recetores de vitamina D nas células do sistema imune poderão elucidar melhor esta relação. Um intake reduzido de vitamina D tem sido associado a um maior risco de desenvolver AR e a sua deficiência parece ser prevalente em indivíduos com AR. Diversas investigações têm ainda demonstrado uma correlação inversa entre os níveis séricos de 25-hidroxivitamina D [25(OH)D] e os parâmetros da atividade da doença.

Objetivo: Estimar a prevalência da deficiência de vitamina D numa população de doentes com AR e avaliar a correlação entre o status da vitamina D e o score de atividade da doença.

Métodos: Estudo observacional transversal num período de seis meses. Oitenta doentes com AR seguidos na Unidade de Reumatologia da Unidade Local de Saúde de Castelo Branco foram incluídos neste estudo. Os indivíduos com AR foram selecionados com base nos Critérios de classificação para a AR do *American College of Rheumatology/European League Against Rheumatism* (2010). As características demográficas, clínicas e laboratoriais dos doentes foram recolhidas através da consulta dos respetivos processos clínicos. A avaliação do status da vitamina D foi feita através da medição dos níveis séricos de 25(OH)D. Definiu-se suficiência de vitamina D como um nível sérico de 25(OH)D ≥ 30 ng/ml, a insuficiência como um nível sérico de 25(OH)D compreendido entre 20-29 ng/ml e a deficiência como um nível sérico de 25(OH)D < 20 ng/ml. Foi aplicado SPSS para análise estatística dos dados obtidos e considerada significância estatística para valor de $p < 0,05$.

Resultados: A população em estudo apresenta 23 (28,8%) doentes com suficiência de vitamina D, 23 (28,8%) doentes com insuficiência de vitamina D e 34 (42,5%) doentes com deficiência de Vitamina D. O valor médio do nível sérico de 25(OH)D é 26,86 ± 17,63 (4-100) ng/ml. Os níveis de 25(OH)D demonstraram-se significativa e negativamente associados com os parâmetros clínicos e laboratoriais da atividade da doença, incluindo o número de articulações tumefatas (p=0,015), o número de articulações dolorosas (p=0,017) e valor da *VS* (p=0,000). Observou-se ainda uma correlação negativa e altamente significativa entre os níveis de 25(OH)D e o *score* de atividade da doença, DAS28-*VS* (r=-,415; p<0,00). Os doentes com um *score* DAS28-*VS* < 3,2 apresentam valores médios do nível sérico de 25(OH)D significativamente superiores, (35,45± 20,03), quando comparados com os doentes com um *score* DAS28-*VS* > 5,1, que apresentam valores médios do nível sérico de 25(OH)D (13,00 ± 7,07) (p<0,001).

Conclusão: Este estudo demonstra que a deficiência de vitamina D é prevalente em doentes com AR e que os seus níveis estão inversamente correlacionados com a atividade da doença. Desta forma, a suplementação com vitamina D poderá melhorar a qualidade de vida dos doentes ao reduzir a severidade e proporcionar alívio sintomático da doença.

P167 – "IT CAN'T BE ZERO": A QUALITATIVE STUDY OF PATIENTS' PERSPECTIVE ON PATIENT GLOBAL ASSESSMENT IN RHEUMATOID ARTHRITIS.

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Background: Patient Global Assessment (PGA) plays an important role in disease activity assessment and

treatment decisions in rheumatoid arthritis (RA). However, the meaning of PGA is open to patient interpretation and this may affect the validity and reliability of clinical assessments.

Objectives: This study aimed to explore: (i) patients' perspective on PGA and its different formulations (ii) how patients' perspective may be improved by a brief explanation from a health care professional (HCP).

Methods: This was a qualitative study including consecutive patients with RA attending a day hospital and an outpatient department of a university hospital in Portugal. Data collection included 4 focus-groups (FGD) and 3 individual interviews to determine patients' perspectives. To help the discussions, patients completed 3 different PGA formulations consecutively and then a HCP explained what information was expected to inform their PGA. The 3 PGA formulations and their implications were then discussed between the patient and the HCP. Data from the FGDs and the interviews were transcribed verbatim and inductive content analysis was undertaken by two independent researchers. Data were coded and categorized in themes, which were agreed upon with patients, HCP and patient research partners.

Results: Fourteen patients (12 women) with RA participated. Their age ranged from 49 to 72 years, disease duration 4 to 30 years and 11 were on biologic DMARDs. Four main themes emerged (Figure 1): (1) The purpose of PGA. Some patients did not know whether PGA affects their treatment decisions in the same way as the objective measures do: "if the answer is not in somehow according to the exams we make (...) obviously they might ignore me". Some believed that PGA was only used for research purposes. (2) The meaning of PGA. Pain was by far the main meaning of PGA, but also fatigue, function and other dimensions including RA sequelae; (3) Measurement difficulties. Many of these difficulties arose from the presentation of the three different PGA formulations, anchor points and their presentations: "I always think that 100 is great: you feel 100%", "Usually the scale is 0 to 10, here I can see 0 to 100"; "Usually it has the numbers, I answer 2, it's not like a straight line like this one"; "Today is different (…) when they ask the last week, we have to go back in time and the pain isn't the same anymore". Also cultural issues and the subjectivity of the concept were expressed: "We, the patients, can't really assess the intensity of the pain, what could be a 9 for her, for me it might be a 5"; "I can never answer 0, because I always have something that affects me". (4) Clarification from a HCP as a key factor for global understanding: "Sometimes I just give a random number. (…) now maybe I will think more carefully and try to be as accurate as possible".

Conclusions: Our results suggest that patients' interpretation of PGA is diverse and may reflect different

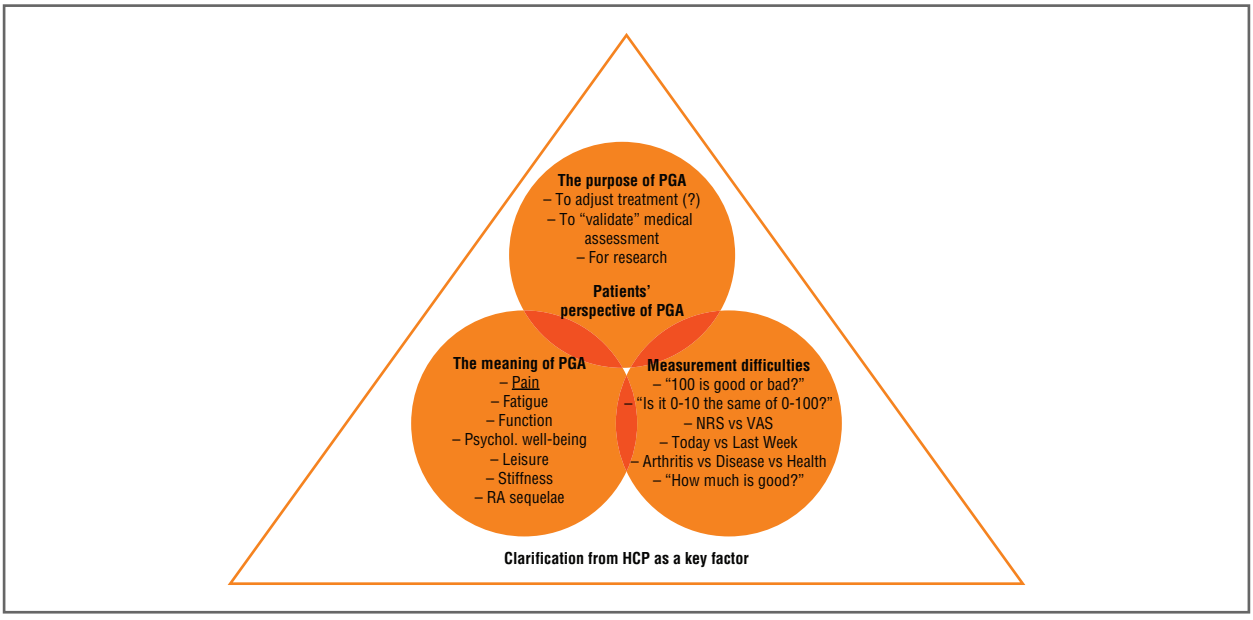

FIGURE 1. Main themes of patient's perspective of PGA

symptoms such as pain or psychological well-being and comorbidities. Standardization of PGA is warranted and dedicated patient debriefing is likely to improve the reliability of this assessment.

P59 – THE BURDEN OF SPONDYLOARTHRITIS – PAASPORT A POPULATION-BASED STUDY

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Background: Psoriatic arthritis (PsA) and ankylosing spondylitis (AS) are chronic inflammatory disorders that impact significantly the patient's quality of life (QoL), health care systems and society; nevertheless little information is available on the epidemiology and impact of PsA and AS in Portugal.

PAASPORT is a sub analysis of EpiReumaPt aiming to estimate the prevalence of PsA and AS in Portugal, characterize Portuguese patients and assess the disease impact on patients QoL.

Methods: EpiReumaPt is a cross-sectional study of Portuguese population (>18 years old) conducted from September 2011 to December 2013. This study included 10,661 subjects screened for rheumatic and musculoskeletal diseases (RMDs) through a structured face-to-face questionnaire in participants' households. All positives screening for at least one RMD were invited for a structured evaluation by a rheumatologist at the local Primary Care Center. Spondyloarthritis (SpA) were evaluated through the new ASAS criteria.

Results: The prevalence of SpA (AS, PsA and other SpA), was of 1.6% (CI 1.2%-2.1%). No differences were observed by gender. North Region had lower prevalence of all types of SpA (1.30% (CI: 0.65%; 1.96%). Comparing to other RMDs, SpA patients presented a higher prevalence of cardiovascular risk factors namely high blood pressure (BP) (20.79%) and high cholesterol level (30.41%), particularly in the PsA patients (high BP= 35.99%; high cholesterol level =45.84%). 23.43% of SpA patients reported gastrointestinal diseases and 13.13% mental disease.

AS patients reported worse QoL when compared with other SpA reflected both in EQ5D score (0.71±0.35) and SF36 dimensions scores. Function is also worse among these patients: HAQ score (0.56±0.95), although the majority of them reported mild to moderate difficulty (72.00%). Comparing to other RMDs, AS and PsA patients have a significant worse EQ5D score (β=- 0.08; p=0.031); and worse SF36 score among the following dimensions: bodily pain (β=-13.83; p=0.001), general health (β=-12.27; p<0.001), vitality (β=-10.68; p=0.011), social function (β=-13.11; p=0.001), emotional role (β=-19.41; p=0.019) and mental health (β=-10.74; p=0.024). Significant differences were also found regarding anxiety symptoms which were higher in AS and PsA (OR=2.30; p=0.003). Regarding physical function AS and PsA reported higher proportion of moderate (RRR=2.44; p=0.045) and severe disability (RRR=2.97; p=0.008). Patient with AS or PsA also presented higher early retirement related to disease (OR=4.95; p=0.007) than patients with other RMDs. A significant proportion of patients with SpA (13.6%) referred absenteeism in the last 12 months.

Conclusions: Results of PAASPORT / EpiReumaPt emphasize the burden of SpA in Portugal presenting poor QoL and high early retirement related to disease, particularly for AS patients. These results showed the need to increase SpA awareness and adjust policies associated with resources allocation.

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P9 – EFFECTS OF TOFACITINIB IN EARLY ARTHRITIS BONE LOSS

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Rheumatoid arthritis (RA) causes immune mediated local and systemic bone damage. Objectives - The main goal of this work was to analyze, how treatment intervention with tofacitinib prevents the early disturbances on bone structure and mechanics in adjuvant induced arthritis rat model. This is the first study to access the impact of tofacitinib on the systemic bone effects of inflammation. Methods - Fifty Wistar adjuvant-induced arthritis (AIA) rats were randomly housed in experimental groups, as follows: non-arthritic healthy group (N=20), arthritic non-treated (N=20) and 10 animals under tofacitinib treatment. Rats were monitored during 22 days after disease induction for the inflammatory score, ankle perimeter and body weight. Healthy non-arthritic rats were used as controls for comparison. After 22 days of disease progression rats were sacrificed and bone samples were collected for histology, micro-CT, 3-point bending and nanoindentation analysis. Blood samples were also collected for bone turnover markers and systemic cytokine quantification. Results - At tissue level, measured by nanoindentation, tofacitinib increased bone cortical and trabecular hardness. However, micro-CT and 3-point bending tests revealed that tofacitinib did not revert the effects of arthritis on cortical and trabecular bone structure and on mechanical properties. Conclusion - Possible reasons for these observations might be related with the mechanism of action of tofacitinib, which leads to direct interactions with bone metabolism, and/or with kinetics of its bone effects that might need longer exposure.

P53 – CLINICAL OUTCOMES OF AFRICAN PATIENTS FROM PORTUGUESE SPEAKING COUNTRIES EVACUATED FOR MEDICAL ASSESSMENT IN PORTUGAL – RHEUMATOLOGY AS A CASE STUDY

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Introduction: Portugal has made an official commitment for improving health in Portuguese speaking African countries (PSAC) by allowing an annual quota of patients evacuated for medical reasons. This pretends to compensate difficulties in health care access and medical resources of these populations. However, the burocratic process that mediates the displacement of patients to Portugal is invariably complex and delayed, creating barriers to medical assess.

Objectives: To report our experience dealing with PSAC rheumatic patients, evaluate their outcomes and the influence of burocratic, social and economic barriers.

Methods: Retrospective analysis of patients evacuated due to medical reasons from PSAC followed-up in our Department for the last 6 years, divided in two groups. The main group corresponded to patients referred due to rheumatic diseases or potentially related conditions. The second group corresponded to patients that were evacuated due to non-rheumatic diseases, but either developed a rheumatic disease during their stay in Portugal or had rheumatic complaints and never sought medical support. A sample (n=30) of these patents were selected randomly to reply to a questionnaire regarding burocratic and socioeconomic restrains.

Results: A total of 76 patients (71.1% female), with an average age of 37 (±15) years were included, representing all PSAC (Guinea-Bissau 31, Cape Verde 20, São Tomé and Príncipe 18, Angola 7), except Mozambique. Two patients with Lupus were re-evacuated (disease flare and lack of mycophenolic acid in its country). Fifty-one patients were included in the main group. Of these, only 39.2% were primarily referred to our Department. The majority of patients (58.8%) had no previous diagnosis and 19.6% had a wrong one (mainly rheumatic fever). After assessment in our Department, we ended up with the following diagnoses: Lupus 9; Rheumatoid Arthritis 8; Spondylarthritis 7; Vasculitis 6; Other connective tissue diseases 5; Osteoarticular infections 3; Other diagnosis 11. At arrival only 11.8% of these patients were under conventional DMARD treatment and after assessment in Portugal this number increased to 60.8% and 11.8% were started on biologics. Hospitalizations were required in 43.1% of patients. Severe damage, measured by indication for orthopaedic, cardiothoracic or vascular surgery, need of chronic dialysis or long-term oxygen therapy, was present in 27.5% patients. Three patients died as consequence of their rheumatic diseases. Ultimately 14 patients were discharged but only 9 (11.8%) returned to their country.

Regarding the second group of patients, the majority (32%) were evacuated due to chronic kidney damage

requiring dialysis; of these, 71.4% were referred due to secondary microcrystalline arthropaty.

Regarding infectious comorbidities, 30.2% of total patients (76) had current or past history of at least one of these: active tuberculosis (9), hepatitis B (15), hepatitis C (2), HIV (1) and HTLV-1 (1). Few patients (13.3%) admitted having surpassed the formal process of evacuation because they "couldn't wait so long". The majority (60%) complained of a total incompliance of their countries stipulated obligations regarding financial support for accommodation, medication, food and transportation. Only 13.3% had complete coverage of all essential needs.

Conclusion: Overall PSAC patients present with long-lasting and severe rheumatic diseases with chronic damage, due to lack of diagnosis and treatment and frequently present with infectious comorbidities and social needs that may interfere with proper treatment.

GRUPO 8

P56 – FRAX®PORT, OSTEODENSITOMETRIA E PREVENÇÃO DAS FRATURAS DE FRAGILIDADE – A REALIDADE DE DUAS USF'S DA ZONA CENTRO

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Introdução: A osteoporose é a patologia óssea metabólica mais frequente, predispondo à ocorrência de fraturas de fragilidade, que estão associadas a grande morbilidade e mortalidade, tendo um grande impacto a nível social e económico.

O FRAX®Port é a versão validada para a população portuguesa do algoritmo que permite estimar o risco individual de fraturas osteoporóticas nos dez anos subsequentes, com base em fatores de risco clínico, podendo incluir ou não o resultado da Osteodensitometria (DXA).

As recentes recomendações portuguesas sobre o diagnóstico e terapêutica da osteoporose facultam orientações práticas e válidas de forma a otimizar a eficiência das intervenções e a minimizar os custos e os riscos. Nesse sentido, destaca-se a utilização da ferramenta FRAX®Port em todos os utentes com mais de 50 anos, como abordagem inicial, devendo a decisão de realizar DXA ou tratamento ser tomada com base no resultado de risco obtido através do FRAX®Port.

O Médico de Família deve avaliar corretamente os utentes, identificar os com maior probabilidade de fratura de fragilidade e realizar medidas de prevenção e tratamento adequadas.

Objectivo: Avaliar a proporção de utilização da ferramenta FRAX®Port e realização de DXA nos utentes da USF Santiago e USF Cidade do Lis, com diagnóstico de Osteoporose (L95).

Metodologia: Realizou-se um estudo observacional transversal descritivo, com uma componente analítica nas duas unidades de saúde familiar, em fevereiro de 2017. Retirou-se do programa MIM@UF a listagem de utentes inscritos nas unidades supracitadas, com o diagnóstico de Osteoporose (L95), relativo a dezembro de 2016 (N=584). Foram consultados os processos clínicos (SClinico®) e foram selecionados todos os utentes cuja codificação foi realizada entre 1 de janeiro de 2015 e 31 de dezembro de 2016. (N=131)

Critérios de inclusão: utentes com o diagnóstico de Osteoporose (L95), avaliados por DXA, cálculo de FRAX®Port ou registo de fratura de fragilidade prévia. (N=110)

Critérios de exclusão: utentes com diagnóstico de Osteoporose (L95) prévio a 2015 e utentes que não têm registo de intervenção diagnóstica ou terapêutica neste âmbito, tendo-se considerado erro de codificação. (N=474)

A análise estatística foi realizada através do SPSS 20®.

Resultados: Da população de 584 utentes foram incluídos 110, com uma média de idade de 68,9 anos, dos quais 99 eram mulheres (90%). Dos 110 selecionados, 21 (19.1%) possuíam registo de FRAX®Port calculado. Desses 21, apenas 6 (28.6%) não tinham DXA incluída no cálculo, havendo 15 (71.4%) cujo FRAX®Port foi calculado incluindo inicialmente o valor da DXA. Em 2 casos o FRAX®Port foi recalculado após a realização da DXA. Dos 110 utentes, 99 (90%) tinham DXA realizada, sendo que 72 (72.7%) tinham o resultado de "Osteoporose" e 27 (27.3%) com "Osteopenia". Dos 110 utentes, 94 (85.5%) encontram-se a realizar terapêutica antiosteoporótica. Dos 21 utentes com FRAX®Port calculado, o resultado preconizou a realização de terapêutica em 17 utentes, e desses, apenas 1 não está medicado.

Discussão: Nas duas USF's, o diagnóstico de Osteoporose é efetuado sobretudo com base no resultado de DXA, encontrando-se uma pequena percentagem de utentes com FRAX®Port calculado. Poucos Médicos de Família utilizam a ferramenta FRAX®Port para ava-

liar a necessidade de prescrição de DXA e instituição terapêutica nestes doentes, havendo ainda pouco reconhecimento da importância da ferramenta FRAX®Port como uma mais valia para uma utilização mais eficaz dos recursos de saúde na prevenção das fraturas de fragilidade em Portugal.

P142 – PATIENT'S ASSESSMENT OF GOLIMUMAB SELF-INJECTION FOR INFLAMMATORY JOINT DISEASES TREATMENT: A QUESTIONNAIRE-BASED SURVEY

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Background: Anti-tumor necrosis factor (TNF) medication plays an important role in inflammatory joint diseases treatment. Comparative effectiveness studies between different anti-TNFs in patients with inflammatory joint diseases have shown no significant differences regarding clinical and adverse events. Therefore, route of administration, location for receiving the medication, intervals between interventions, and patient's self-adaptation are ever more relevant topics when selecting a biologic agent. Despite its importance, only few effectiveness studies reported results from the patient's preference perspective.
Aim: To describe the patient experience regarding subcutaneously administered injections of golimumab in patients with rheumatoid arthritis and predominantly peripheral spondyloarthritis.
Methods: A questionnaire-based cross sectional study was conducted at Coimbra University Hospital Center, between September and October 2016. Consecutive patients with rheumatoid arthritis and predominantly peripheral spondyloarthritis who were receiving subcutaneous golimumab for at least 3 months were included. The sociodemographic characteristics, disease activity and function were collected from last outpatient clinic database. Participants were asked about the reasons to choice subcutaneous therapy, autoinjector device satisfaction and injection experience, through a survey questionnaire developed specifically for this study. Descriptive analysis of data was performed using SPSS v20.0.
Results: A total of 24 patients (66.7% female, mean age 56±13 years and mean disease duration 15±13 years) participated in this study. Fourteen (58.3%) patients had rheumatoid arthritis (DAS28- ESR=2.6 ± 1.0 and HAQ = 1.0 ± 0.5) and 10 (41.7%) had predominantly peripheral spondyloarthritis (DAS28-ESR=1.6 ± 0.2, HAQ = 0.9 ± 0.2 and BASDAI 3.0±1.5). Twenty-one (87.5%) patients reminded have been informed about different anti-TNFs alternatives and all received instructions about subcutaneous self-administration. The main reasons to choose a subcutaneously therapy, were the ability to receive the medication at home (85.7%) and/or the time spent receiving the therapy (76.2%). Seven (29.2%) patients reported some difficulties to manipulate and to activate the autoinjector device, 4 (16.7%) stated problems to place the device against the skin in a correct position and 3 (12.5%) indicated difficulties to know when the injection is complete. When prompted about injection experience, 5 (20.8%) reported pain/burning during injection and 6 (25%) stated bruising/redness/itching after injection. None reported a local infection.
Conclusion: Subcutaneous golimumab appears to enable patients with rheumatoid arthritis and spondyloarthritis to perform a successful self-injection and may contribute to improved patients satisfaction and compliance with therapy. Future research should examine and compare patient experiences regarding available subcutaneous anti-TNFs agents

P5 – IMMUNOGENICITY OF BIOSIMILARS FOR THE TREATMENT OF INFLAMMATORY RHEUMATIC DISEASES: A REVIEW FROM CONFIRMATORY CLINICAL TRIALS

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Background: The assessment of immunogenicity is

mandatory during the comparability exercise of biosimilar candidate drugs, as even small structural differences can potentially elicit antidrug antibodies (ADA) and affect efficacy and safety.

Objective: To review the incidence of ADA and neutralizing ADA (nADA) in confirmatory clinical trials of biosimilar drugs approved for the treatment of inflammatory rheumatic conditions in the European and North-American markets; to review the type of assays used for this purpose; to compare the incidence of ADA with historical data from reference biotechnological drugs.

Methods: We performed a literature search in the Medline database and hand searched EULAR and ACR meeting abstracts to identify phase I and III confirmatory clinical trials of biosimilar drugs for the treatment of rheumatic conditions approved in the European and North-American markets. Open-label extensions involving biological switch were not included. All outcomes regarding immunogenicity were extracted (ADA, nADA and type of immunogenicity assays).

Results: We screened 255 articles by title and abstract

TABLE. IMMUNOGENICITY OF BIOSIMILARS APPROVED FOR THE TREATMENT OF INFLAMMATORY RHEUMATIC DISEASES

Study population		Reference drug ADA (%)	Reference drug nADA (%)	Biosimilar ADA	Biosimilar nADA (%)	ADA/nADA assay
Rheumatoid arthritis	**CT-P13 (infliximab)**					
	Yoo 2013 (PLANETRA, 30 w)	48.2	NA	48.4	NA	Electrochemiluminescence immunoassay/NA
	Yoo 2016 (PLANETRA, 54 w)	36.0	NA	41.1	NA	Electrochemiluminescence immunoassay/ /flow-through immunoassay
	SB2 (infliximab) Choe 2015 (30 w)	49.7	NA	55.1	NA	Electrochemiluminescence immunoassay/competitive ligand-binding assay
	Choe 2015 (54 w)	57.5	NA	62.4	NA	NA
	SB4 (etanercept)					
	Emery 2015 (24 w)	13.1	3	0.7	0	Electrochemiluminescence immunoassay/competitive ligand-binding assay
	Vencovsky 2015 (52 w)	13.2	NA	1.0	NA	NA
	ABP 501 (adalimumab)					
	Cohen 2015 (24 w)	38.2	11.1	38.3	9.1	NA
Ankylosing spondylitis	**CT-P13 (infliximab)**					
	Park 2013 (PLANETAS, 30 w)	22.5	NA	27.4	NA	Electrochemiluminescence immunoassay/NA
	Park 2016 (PLANETAS, 54 w)	23.0	100	19.5	100	Electrochemiluminescence immunoassay/flow-through immunoassay
Psoriasis	**GP2015 (etanercept)**					
	Griffiths 2016 (EGALITY, 52 w)*	1.9	0	0	0	Electrochemiluminescence immunoassay/competitive ligand-binding assay

ADA: antidrug antibody, NA: not available, nADA: neutralizing antidrug antibody * The EGALITY study presented a four-arm design in which two arms were continuously treated with either reference etanercept or GP2015 and the other two arms were systematically switched. The results presented in this table concern the groups continuously treated with reference etanercept or GP2015.

and 7 publications fulfilled our inclusion criteria. Three meeting abstracts were also included. Six studies assessed infliximab biosimilars (CT-P13 and SB2), three studies assessed etanercept biosimilars (SB4 and GP2015) and one study assessed an adalimumab biosimilar (ABP 501). All but two concerned phase III trials and seven were performed on rheumatoid arthritis patients. All biosimilars had comparable immunogenicity profiles in respect to their reference drugs, except for the etanercept biosimilar SB4, which presented significantly less ADA when compared to reference etanercept (0.7% *vs* 13.1% at 24 weeks and 1.0% *vs* 13.2% at 52 weeks, p<0.001 for both). As expected, infliximab had the highest incidence of ADA; the proportion of ADA in studies of infliximab and adalimumab was higher when compared to historical data. Only 4 studies reported nADA, which were highest in the infliximab biosimilar CT-P13 54-week study in ankylosing spondylitis patients. Electrochemiluminescence immunoassay was the preferred method to measure ADA. Table 1 summarizes the main findings in the included studies.

Conclusions: Currently approved biosimilars for the treatment of rheumatic diseases have comparable immunogenicity profiles in respect to their reference drugs. The discrepancy in ADA between SB4 and reference etanercept did not correlate with efficacy or safety and did not preclude biosimilarity, according to the regulatory agencies. The higher proportion of ADA compared to historical data may be explained by the greater sensitivity of current immunogenicity assays, such as electrochemiluminescence.

P77 – MYCOPHENOLATE MOFETIL AS AN IMMUNOMODULATORY FOR INFLAMMATORY EYE DISEASE: A CASE-SERIES FROM A TERTIARY CENTRE

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Purpose: To report short-term (3-6 months) efficacy and safety of mycophenolate mofetil (MMF) in inflammatory eye disease (IED).

Methods: Retrospective case-series. The medical records of patients with IED who started MMF from July-December 2016, at the Ophthalmology Department of Hospital de Santa Maria, were retrospectively reviewed. Demographic data, indications for starting MMF, short-term response to treatment and side effects were assessed. MMF was given in a dose of 500 mg twice a day (bid) for 10-15 days and then increased to 1g bid after clinical and laboratory work-up confirming tolerability.

Results: 8 patients (3 male) with a mean age of 53 years old were studied. IEDs that motivated immunosuppression with MMF were: a) bilateral undifferentiated anterior and intermediate uveitis, refractory to oral prednisolone 1 mg/kg/day with structural ocular complications with no other additional immunosuppression (active n=2, inactive n=1), b) sight-threatening cicatricial ocular pemphigoid also under oral prednisolone 1 mg/kg/day and previous methylprednisolone pulses 1000 mg for 3 days (n=1), c) Behçet's posterior uveitis non controlled under cyclosporine A 150 mg bid and refractory to several anti-TNF drugs (n=1) and d) high-risk corneal graft requiring systemic immunosuppression also under oral prednisolone 1 mg/kg/day with progressive taper after corneal graft (n=3). After 3 months, MMF was able to control intraocular inflammation with no flares in all uveitis patients. Also, no episodes of corneal graft rejection were remarked in patients taking MMF for this particular purpose. Adverse effects were: transient gastrointestinal disturbances (n=1) and transient and mild elevation of liver enzymes (n=1) with no need to dose reduction/withdrawal from treatment. Stabilization or improvement of visual acuity was achieved in all eyes. There were no withdraws from treatment due to adverse events or treatment failure after 6 months.

Conclusions: MMF had beneficial effects on intraocular inflammation and corneal graft rejection prophylaxis. Systemic adverse effects were transient and minor in severity. These data support the existing literature on MMF, as an effective corticosteroid-sparing agent for IED and with a manageable side effect profile.

TABLE. DEMOGRAPHIC CHARACTERISTICS AND ADVERSE EFFECTS OF INCLUDED SUBJECTS

Gender	Age	Clinical reason to start MMF	Dose	Concomitant immunosuppression	Adverse effects
M	37	Behçet retinal vasculitis, refractory to several anti TNF	500 mg bid → 1 g bid	Oral CsA 150 mg bid	0
F	47	High risk corneal graft		Topical CsA 0.5% 5 times daily	Mild elevation of liver enzymes
F	77	Undifferentiated anterior and intermediate bilateral granulomatous uveitis		None	0
F	72	Undifferentiated anterior and intermediate bilateral granulomatous uveitis		None	0
F	71	Undifferentiated anterior and intermediate bilateral granulomatous uveitis		None (intolerant to MTX)	Transient gastrointestinal disturbances
M	55	High risk corneal graft		Topical CsA 0.5% 5 times daily	0
M	38	High risk corneal graft		Topical CsA 0.5% 5 times daily	0
F	23	Cicatricial ocular pemphigoid		Oral prednisolone (1 mg/kg/day initially)	0

UIP – usual interstitial pneumonia; NSIP – nonsepcific intersticial pneumonia

P101 – FATIGUE AND DEPRESSION IN PATIENTS WITH BEHCET'S DISEASE.

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Background: Behcet's disease (BD) is a systemic vasculitis with unknown etiology defined by a classic triad consisting of aphtous ulcers of the mouth and genital and inflammation of the eyes. In addition to these, BD may involve cardiovascular, pulmonar, neurological, articular and gastrointestinal systems. Fatigue, anxiety and depression are an important and common problems in chronic inflammatory diseases. There are few studies of fatigue in BD patients. Ilhan et al.[1] reported more fatigue in BD patients than in healthy controls.

Objectives: The objective of this study was to investigate fatigue and depression in patients with BD and to examine the relationship between these symptoms and disease activity and gender.

Methods: Forty four patients with BD and thirty nine healthy controls were included in this study. Age, gender, disease duration and the clinical involvements were recorded. All subjects completed the Fatigue scale (FACIT-F), Short form-36 (SF-36), Hospital Anxiety and Depression scale (HADS) and Health Assessment Questionnaire (HAQ). Disease activity among BD patients was assessed using the Birmingham Vasculitis Activity Score (BVAS).

Results: The mean age was 40.0 years for BD patients and 38.7 for healthy controls. 77% of BD patients were women. The mean disease duration for BD patients was 6.1 years. All patients had oral ulcers and genital ulceration; 20 patients had pseudofolliculitis; 9 had uveitis, 9 had erythema nodosum, 12 had articular involvement, 5 patients had vascular involvement, 4 had pathergia, 1 had orchitis and one had gastrointestinal involvement. Thirty two BD patients were taking medication, including colchicine or DMARDs or their combinations. Seventeen patients had inactive disease and twenty seven had BVAS ≥ 1. Both the HADS-depression (HADS-D) (4.7 *vs* 2.5, P=0.004) and HADS-anxiety (HADS-A) (8.3 *vs* 5.7, P=0.03)) scores were elevated in BD patients compared to healthy controls. FACIT was higher in healthy controls in comparison with BD group (44.1 *vs* 36.6, P<0.001), revealing less levels of fatigue. There were no differences between

TABLE. CORRELATIONS BETWEEN FACIT-F AND HAQ, HADS-A, HADS-D, SF-36, AGE, DISEASE DURATION IN BEHCET'S DISEASE

	HAQ	HADS-A	HADS-D	SF36	Age	Disease duration
Correlation coefficient	-0.670	-0.569	-0.562	0.857	-0.370	0.053
P-value	<0.001	<0.001	<0.001	<0.001	0.013	0.103

gender on these scores.

There were no significant differences in FACIT-F, HADS-A and HADS-D scores with the disease activity (P= 0.952, P= 0.391 and P= 0.286, respectively).

FACIT-F had a negative correlation with HAQ and HADS and a positive correlation with the different components of SF-36 and age. FACIT score was not correlated with disease duration (Table 1).

Conclusion: In our study, fatigue and increased levels of anxiety and depression were more common in BD patients. Contrary to the study of Ilhan et al. (1), we found that fatigue was not higher in patients with active disease. Similarly, there were no correlation between the assessed scores and gender. Although these results, we believe that controlling the symptoms will improve the quality of life in BD patients.

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P124 – TRANSLATION AND CROSS-CULTURAL ADAPTATION TO EUROPEAN PORTUGUESE LANGUAGE OF OAQOL: OSTEOARTRHITIS QUALITY OF LIFE

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Introduction: Osteoarthritis (OA) is the most prevalent rheumatic disease and a major cause of decreased quality of life (QoL) in the elderly population. Patient reported outcomes have been used in rheumatic diseases to evaluate different aspects of disease spectrum, including QoL. There is a lack of tools in European Portuguese language measuring QoL in OA patients.

Objective: The aim of this study is to describe the translation and cultural adaptation of OAQoL questionnaire into European Portuguese and test the conceptual equivalence (clarity, comprehension, cultural relevance and appropriateness of the items and words used) of the translated version in the Portuguese context.

Methods: The original UK English version of OAQoL was translated into European Portuguese using the dual panel methodology.. Two panels were conducted; a bilingual panel (to provide the initial translation into the target language) and a lay panel (where items are assessed by people of average and below average education levels for comprehension and "naturalness" of language). Cognitive debriefing interviews with patients diagnosed with OA by a Rheumatology specialist were conducted to test the applicability, relevance and comprehensiveness of the new instrument. The interviews involved a sample of patients with different gender, age, disease duration, and educational background. The appropriate informed consent was obtained.

Results: Both the bilingual panel and lay panel consisted of 5 individuals with the same moderator for each group. No major difficulties were experienced in producing the translations, the lay panel could easily choose from the options provided by the bilingual panel or they produced a simpler, more natural Portuguese translation. Ten cognitive debriefing interviews were conducted with OA patients (3 males and 7 females), with median age of 64.5 years (IQR: 63-77). In terms of marital status, 5 of them were married, 2 single, 2 divorced and 1 widow. There were 6 retired patients and 4 full time workers. Self-reported general healthy status was good in 4 patients, fair in 3 and poor in other 3 patients. Self-reported OA severity was moderate in 4 patients, quite severe in 5 and very severe in 1 patient. The Mean time to complete the questionnaire was 5 minutes (Min=3; Max=8,). No changes

were made to the Portuguese OAQoL following the cognitive debriefing interviews. Interviewees reported the measure to be clear, easy to understand and complete and that the content was relevant without missing important issues as well as culturally appropriate.
Discussion: The Portuguese version of the OAQoL questionnaire showed acceptable linguistic and cultural validity and can become a useful tool in clinical practice and research related to OA. The evaluation of reliability, construct validity and sensitivity are currently being undertaken and are warranted for the full implementation of this tool with Portuguese OA patients

P29 – SERUM AMYLOID A LEVELS AS A POTENTIAL BIOMARKER TO MONITOR PSORIATIC ARTHRITIS PATIENTS ON BIOLOGICS – A RETROSPECTIVE OBSERVATIONAL STUDY

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Background: According to previous studies, serum amyloid A (SAA) is involved in the pathophysiology of several conditions including inflammatory arthritis and psoriasis. Recent evidence suggests its valuable role in monitoring disease activity in Rheumatoid Arthritis, but its role is yet to be determined in Psoriatic Arthritis (PsA).
Objective: To study the association between SAA levels and its variation with other biomarkers and disease activity/functional parameters in a cohort of PsA patients under biologic therapy.
Methods: Observational retrospective study was conducted from January 2015 until December 2016 including patients with PsA (according to CASPAR criteria) followed at our Rheumatology department with at least one measurement of SAA levels. Demographic and clinical data were obtained by consulting the national database (Reuma.pt). The disease activity/functional scores from at least one visit and corresponding measurements of SAA, ESR and CRP levels were collected. The difference (**Δ**) between 2 evaluations separated by a median time of 6 months [6-18] was calculated for all variables. Agreement between dichotomized biomarkers was calculated using kappa coefficients. Correlations were studied using Pearson and Spearman coefficient analysis. Significance level was set as 0.05.
Results: 53 PsA patients were included. 31 (59%) patients were females with a mean (SD) age of 50 (11.2) years and a median disease duration of 9 years [1-43]. 28% had axial involvement, 34% peripheral involvement and 38% had both types. All patients were under biologic DMARD. 100 SAA measurements were collected. Median SAA and ESR levels were significantly superior in female patients (23 *vs* 6mm/1sth and 8.6 *vs* 4.4mg/L, respectively, $p<0.05$) and only ESR levels correlated with age ($r=0.20$, $p=0.05$). The three biomarkers showed a weak association with serum creatinine levels, with greater correlation for SAA ($r=0.46$, $p<0.001$). SAA levels had a stronger correlation with CRP ($r=0.75$, $p<0.001$) than with ESR levels ($r=0.26$, $p<0.01$). SAA and CRP (dichotomized as negative/positive) had a greater level of agreement (=0.40) compared to ESR (=0.26 and =0.32, respectively). No significant correlations were found between the biomarkers and the tender/swollen joint count or the pain/global disease activity VAS. SAA levels correlated with ASDAS CRP ($r=0.43$, $p<0.001$) and weakly with ASDAS ESR and DAS28 CRP ($r= 0.20$ and $r=0.24$, respectively, $p<0.05$). Only ESR had a significant weak correlations with BASDAI, MASES and SPARCC scores ($r=0.25$, $r=0.21$, $r=0.35$; $p<0.05$). All the biomarkers had weak correlations with BASFI and HAQ scores. **Δ**SAA levels had a weak correlation with **Δ**CRP ($r=0.32$, $p=0.03$; $n=47$) and no significant association was found with **Δ**ESR. **Δ**SAA correlated significantly with **Δ**ASDAS CRP and **Δ**BASMI ($r=0.32$, $r=0.39$; $p<0.05$).
Conclusion: This study showed that SAA levels and its variation had a significant correlation with CRP levels and its variation, respectively. Significant association with ASDAS CRP variations suggests that serial measurements of SAA may represent an additional marker for monitoring disease activity over time in PsA patients.

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P83 – IDENTIFICATION OF SOCIODEMOGRAPHIC FACTORS IN PERSISTENCE/DISCONTINUATION OF BIOLOGICAL THERAPY IN RHEUMATOID ARTHRITIS PATIENTS

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Background: The use of biological DMARDs to treat Rheumatoid Arthritis patients has increased considerably in recent years, mainly due to their efficacy. Several studies aimed to identify clinical and therapeutic factors for assessment of persistence/discontinuation of biological therapy in these patients. However, only few studies have recognized sociodemographic factors in this area.
Objectives: To identify sociodemographic factors that affect persistence or discontinuation of biological therapy (in relation to the 1st biologic) in Rheumatoid Arthritis patients.
Methods: A retrospective study of Rheumatoid Arthritis patients followed at the Rheumatology Service of Hospital Egas Moniz with 1st biologic starting between 1/1/2000 and 31/6/2015. Electronic clinical records (Reuma.pt database) were reviewed for all patients that had been treated with biologic for at least 12 months previously to recruitment. Available sociodemographic, clinical and therapeutic data were evaluated using the Test for proportions, t-Test with equal variances, Fisher's exact Test, t-Test with unequal variances. Kaplan-Meier survival analysis and the Wilcoxon Test were used to test for differences between curves. The two main comparative groups were patients who persisted biological therapy and patients who discontinued that same therapy.
Results: 116 patients with Rheumatoid Arthritis diagnosis were included. 36 patients maintained biological therapy and 80 patients discontinued that same therapy. The mean age was 60.7 ± 12.1 years in the first group and 59.2 ± 12.5 years in the second (p=0.5421). Gender distribution was similar between both groups (p=0.4005). A higher prevalence of caucasian patients (p=0.5856), non-Lisbon born (p=0.6007), Lisbon residents (p=0.7611), married (p=0.4182), higher than primary education (p=0.6355), pre-illness employment situation be full-time (p=0.4420), current employment situation be not full-time (p=0.8657) was found in both groups, though statistical significance was not reached. In the survival curves analysis, patients who only had primary education (p=0.0485) and did not work full-time (p=0.0454) discontinued biological therapy later. Etanercept (47%) was the most discontinued biologic agent, followed by Infliximab (33%), and Adalimumab (13%). 48 patients discontinued their 1st biologic, mainly due to secondary ineffectiveness (60%).
Conclusions: Rheumatoid Arthritis patients with lower education (primary) and who did not work full-time discontinued biological therapy later. It is essential to develop further studies in this area in order to recognize sociodemographic characteristics that may lead to persistence/discontinuation of biological therapy in Rheumatoid Arthritis patients.

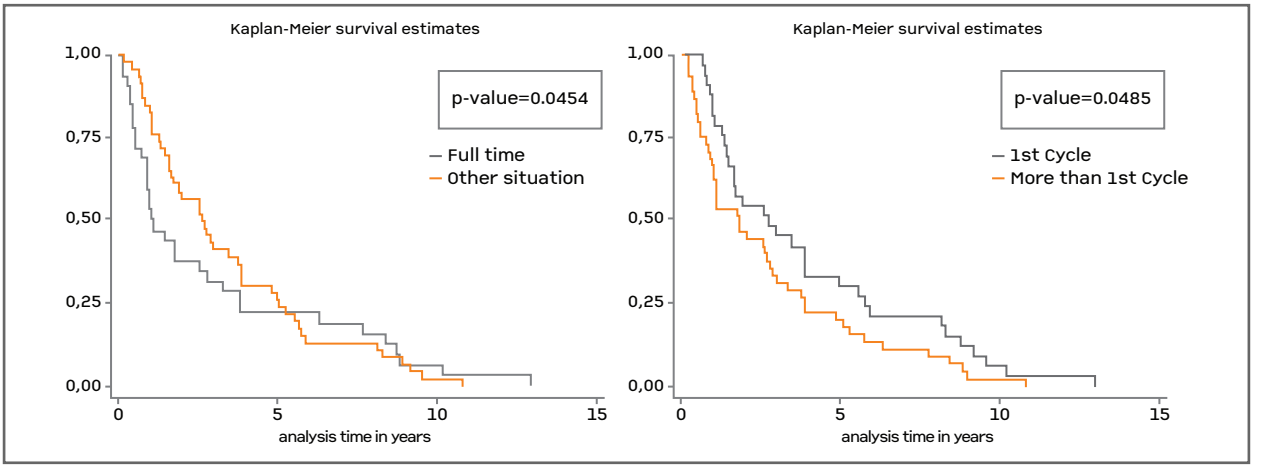

FIGURE. Survival curves analysis

GRUPO 9

P150 – O PAPEL DA BIÓPSIA SINOVIAL NA AVALIAÇÃO DIAGNÓSTICA DE UMA MONOARTRITE

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Introdução: No diagnóstico diferencial de uma monoartrite, em conjunto com os achados clínicos e laboratoriais, a biópsia da membrana sinovial pode ser de grande utilidade na precisão diagnóstica, em particular no diagnóstico de uma causa infecciosa atípica ou de patologias raras da sinovial[1]. As culturas da sinovial podem permitir identificar agentes microbianos não identificados em culturas de sangue ou liquido sinovial e a histologia pode mostrar lesões sinoviais típicas de infeções crónicas, como tuberculose ou infeções fúngicas, e permitir o diagnóstico de doenças granulomatosas e infiltrativas. A identificação de alguns casos de sinovite vilonodular pigmentada ou tumores raros da sinovial só será possível com a realização da biópsia.

O tecido sinovial é de fácil acesso utilizando uma agulha de biópsia. A biópsia ecoguiada tem demonstrado muitas vantagens em comparação com o uso da artroscopia ou fluoroscopia[2].

O serviço de Reumatologia da ULSAM iniciou recentemente a realização de biópsias sinoviais ecoguiadas, utilizando agulhas descartáveis semi-automáticas do tipo guilhotina. Este método tem sido referido como eficaz para obter uma quantidade de tecido suficiente, bem tolerado e sem complicações significativas.[1,2]

Objetivo: Avaliar a utilidade, segurança e tolerabilidade das biópsias sinoviais realizadas em doentes com uma monoartrite.

Metodologia: Análise retrospectiva dos casos de doentes submetidos a biópsia sinovial entre junho e dezembro de 2016. Recolheram-se dados demográficos, clínicos, histológicos, assim como intercorrências durante e após o procedimento.

Resultados: Foram realizadas 5 biópsias, em 3 homens e 2 mulheres, com idade média de 42.6 anos.

Num doente de 39 anos com artrite recidivante de um joelho, com diagnóstico prévio de artrite sética por *Staphylococcus aureus*, mas sem a resposta completa esperada ao tratamento médico e cirúrgico, foi realizada biópsia para exclusão de outras causas. No estudo anátomo-patológico foram identificadas estruturas morfologicamente suspeitas de esporos fúngicos, que associadas à positividade para o antigénio Galactomanano apoiaram o diagnóstico de artrite fúngica.

A biópsia da sinovial da tibiotársica de uma jovem de 30 anos com artrite persistente dessa articulação há 5 anos, sem resposta às variadas terapêuticas tentadas, mostrou achados compatíveis com o diagnóstico de sinovite nodular pigmentada.

Outro doente de 66 anos apresentava sinovite de um punho, com 1 ano de evolução, sem resposta aos tratamentos instituídos. O resultado da biópsia foi apenas de uma sinovite crónica inespecífica.

Em duas doentes de 41 e 36 anos, com sinovite persistente do joelho e tibiotársica, respetivamente, sem uma causa identificada, a histologia da sinovial evidenciou alterações inespecíficas.

Esta técnica foi bem tolerada, sem registo de quaisquer complicações de relevo imediatas ou tardias. Apenas um doente referiu queixas álgicas na articulação após o procedimento, que resolveu em 24h sem necessidade de terapêutica.

Conclusão: A biópsia sinovial guiada por ecografia, embora seja uma técnica invasiva, é um procedimento seguro que pode ser de grande relevo no diagnóstico diferencial de uma monoartrite.

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P180 – RITUXIMAB NA ARTRITE REUMATÓIDE: A EXPERIÊNCIA DE UM SERVIÇO DE REUMATOLOGIA

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Introdução: O rituximab (RTX), um anticorpo monoclonal anti-CD20, é uma terapêutica eficaz no tratamento da Artrite Reumatóide (AR). Estudos a longo prazo têm demonstrado que a sua eficácia perfil de segurança se mantêm estáveis ao longo dos múltiplos ci-

clos e ao longo do tempo[1,2]. Desta forma, além dos benefícios terapêuticos, parece poder haver, também, ganhos económicos.

Objetivos: Avaliar a eficácia e segurança do RTX ao longo do tempo em doentes com AR.

Métodos: Estudo retrospetivo incluindo doentes com AR que iniciaram RTX após falência a pelo menos uma terapêutica biotecnológica. Para avaliação da eficácia e segurança ao longo do tempo, recolheram-se os parâmetros relativos aos índices de atividade da doença (*disease activity score-28 joints – DAS28, clinical disease activity index* – CDAI e *simplified disease activity index* - SDAI) no início do tratamento e no momento presente e os efeitos adversos registados.

Resultados: Iniciaram RTX, desde 2007, 17 doentes, 14 do sexo feminino. A idade média era de 53,4 (±11,3) anos e apresentavam uma AR com diagnóstico em média há 15,2 (±2,6) anos. O RTX foi a 2ª linha de tratamento em 7 doentes e os restantes já tinham apresentado falência a pelo menos 2 biológicos. Um doente abandonou a consulta 3 anos após ter iniciado RTX e 3 doentes passaram a ser seguidas em outro Centro. Assim, nos 13 doentes que mantiveram acompanhamento regular ao longo do tempo o tratamento com RTX foi iniciado em média há 7,7 anos, com mínimo de 4 meses e máximo de 10 anos. No início do tratamento, os doentes apresentavam em média 12 articulações dolorosas (AD), 10 articulações tumefactas (AT) e um DAS28, CDAI e SDAI de 5,7, 32,7 e 34,7, respetivamente. Em cada doente foram realizados em média, até ao momento, 3,2 ciclos de RTX (mínimo 1 e máximo 8). Registou-se apenas uma reação infusional, com *flushing* facial, que reverteu rapidamente não tendo sido necessária a suspensão do fármaco. Não houve registo de outros eventos adversos. Em 2 doentes foi realizado *switch* para outra terapêutica, por ineficácia do RTX. Os 11 doentes que se mantêm sob esta terapêutica estão, em média, há 3 anos sem realizar perfusão. Na avaliação mais recente, os índices de atividade médios (DAS 28, CDAI e SDAI) e o número de AD e AT foram de 2,9, 8,9, 9,7, 2,4 e 2,1, respetivamente. Excluindo 2 doentes que iniciaram esta terapêutica apenas há um ano ou menos, estes valores passam para 2,5, 4,3, 4,8, 0,3 e 0,2, respetivamente. O DAS 28 teve uma variação média de 2,8 unidades desde o início do RTX. Na última avaliação, 54,5% dos doentes estavam em remissão de acordo com o DAS 28 (<2,6). Excluindo os 2 doentes que iniciaram mais recentemente RTX verificou-se que esta percentagem foi de 66,7%

Conclusão: Apesar do número reduzido de doentes, nesta avaliação verificou-se que a utilização do RTX, após falência a outro biológico, em doentes com AR, foi eficaz a longo prazo, com um bom perfil de segurança. A estabilidade clínica verificada ao longo dos anos em vários doentes, sem necessidade de retratamentos regulares, parece resultar, face a outras terapêuticas, em ganhos económicos.

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P207 – MICROARTHROSCOPIC GUIDED SYNOVIAL BIOPSIES IN RHEUMATOLOGY PRACTICE: BENEFITS FOR THE DIAGNOSIS AND TREATMENT OF INFLAMMATORY ARTHRITIS PATIENTS.

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Background: Synovial biopsies have been collected by rheumatologists for several decades using arthroscopic guidance with the additional advantages of joint visualization and lavage. We aim to analyze the outcomes of the first 38 knee microarthroscopic guided synovial biopsies (mAGSB) performed at our centre for diagnosis and (non-orthopedic) therapeutic purposes.

Methods: mAGSB were performed according to standardized procedures. Twenty nine were done for diagnostic purposes to patients with knee arthritis of unknown etiology, after application of a clinical algorithm. The remaining 9 patient had a therapeutic indication. A macroscopic scoring for vascularization and proliferation was applied and synovial tissue processed for routine histology and microbiology assessment.

Results: 38 patients were submitted to mAGSB. Seventeen had a previous diagnosis of inflammatory arthritis: RA (3), JIA (3), PsA (4), SLE (1), SpA (1), Gout

(2), DDPPC (2), septic arthritis (1). The remaining patients had no previous rheumatic disease and presented with monoarthritis (12) or oligoarthritis (9) of unknown etiology. Considering the monoarthritis group, Mycobacterium tuberculosis was isolated in 2 patients and a definite diagnosis of osteoarthritis (1), crystal induced arthritis (3), psoriatic arthritis (1), lipoma arborescens (2) was established. In 3 cases a definite diagnosis was not yet possible. In the oligoarthritis group, 2 patients had a definite diagnosis, of AR (1) and Gout (1), nevertheless for the remaining neither synovial membrane macroscopic, histology nor microbiology analysis helped to clarify the diagnosis. In 16/38 patients concomitant corticosteroids administration was performed with additional benefits to the joint lavage. Images suggestive of crystal deposits were identified in 10 patients. There were no major complications of this technique with only 1 patient developing a minor hematoma in at inferior portal.

Conclusions: Patients submitted to a microarthroscopy/mAGSB benefit from this technique for clinical diagnosis work up including macroscopic, histology and microbiology assessment. Additionally, patients can receive simultaneously a joint lavage and intra-articular joint injection with a potentiated effect in the control of inflammation. Despite the application of commonly available synovial tissue study strategies in 23% of patients (the majority with oligoarthritis) it was not possible to establish a definite diagnosis underlying that further synovial tissue biomarkers for inflammatory arthritis diagnosis are required.

P147 – CALCIFICAÇÃO DOS LIGAMENTOS PERI-ODONTÓIDES NA DOENÇA POR DEPOSIÇÃO DE CRISTAIS DE PIROFOSFATO DE CÁLCIO

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Introdução: A doença por deposição de cristais de pirofosfato de cálcio (DDCPC) é a segunda artropatia microcristalina mais comum, afectando predominantemente doentes idosos. A forma de apresentação é heterogénea, sendo a sua prevalência e incidência difíceis de definir. Infrequentemente, depósitos de cristais de pirofosfato de cálcio podem ser observados nas estruturas do esqueleto axial. Na coluna cervical os depósitos microcristalinos podem ser identificados nas estruturas articulares e ligamentares incluindo os ligamentos peri-odontóides. Frequentemente assintomática, a calcificação dos ligamentos peri-odontóides poderá estar associada a cervicalgia aguda com febre, rigidez da nuca e elevação dos parâmetros de fase aguda – síndrome do dente coroado (SDC). Poderá também cursar com quadros de compressão mielorradicular ou mi-

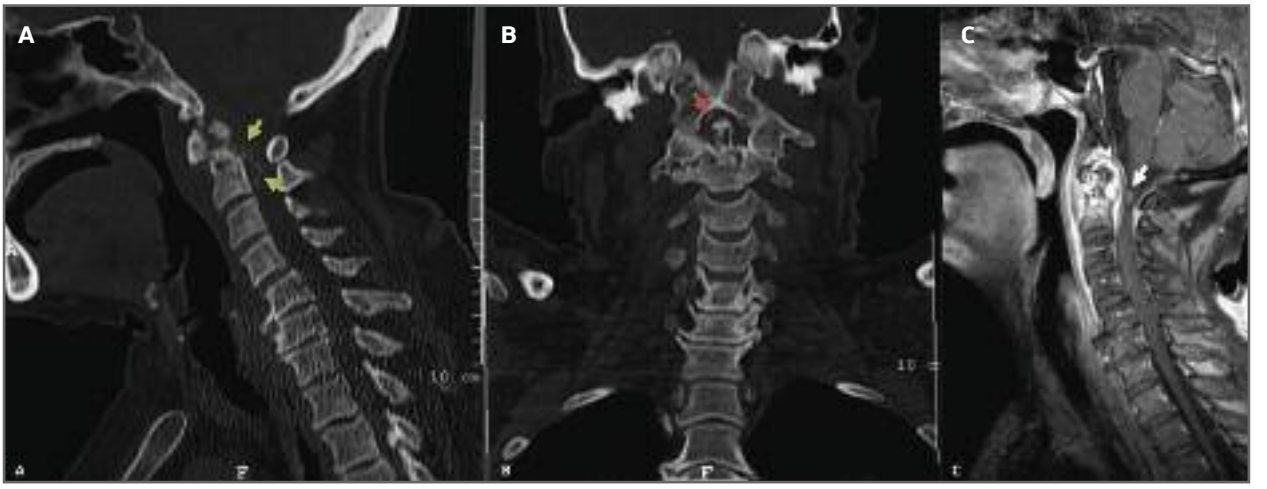

FIGURA. Pseudotumor inflamatório por calcificação dos ligamentos peri-odontóides em doente de 76 anos com doença por deposição de cristais de pirofosfato de cálcio e quadro de tetraparésia flácida.
A: tomografia computorizada em corte sagital revelando erosões do odontóide e calcificação do ligamento transverso e banda longitudinal inferior (setas verdes). B: tomografia computorizada revelando erosões do odontóide e calcificação do ligamento alar (seta vermelha). C: ressonância magnética em corte sagital, sequência Tlw com supressão de gordura (SPIR) e administração de gadolínio, revelando exuberante reforço do sinal na periferia do odontóide e foco de mielomalacia (seta branca).

metizando outras síndromes (meningismo, tipo-polimialgia reumática / arterite de células gigantes, síndrome febril indeterminada).
Objectivos: Caracterizar os doentes com DDCPC com calcificação dos ligamentos peri-odontóides.
Métodos: Análise descritiva, de corte transversal, dos dados demográficos, clínicos, laboratoriais, imagiológicos, e de terapêutica, de doentes não sequenciais, cumprindo critérios EULAR para DDCPC definitiva ou provável, identificados pelo médico reumatologista assistente como tendo calcificação dos ligamentos periodontóides em tomografia computorizada (TC) da coluna cervical ou crânio-encefálica.
Resultados: Foram identificados 19 doentes, com média de idades de 77±9 anos, dos quais 74% eram mulheres. As formas de apresentação inicial foram cervicalgia (n=8), SDC (n=2), tipo-polimialgia reumática (n=1), tetraparesia flácida (n=1), e achado imagiológico (n=7). Artrite periférica e febre foram objectivados em 79% e 37% dos doentes, respectivamente. Verificaram-se elevação da velocidade de sedimentação e da proteína C reactiva, tal como condrocalcinose de outras regiões anatómicas em todos os doentes. As calcificações dos ligamentos peri-odontóides foram mais frequentemente identificadas no ligamento transverso (n=17). O estudo por TC e ressonância magnética da doente com tetraparesia flácida revelou um pseudotumor inflamatório e erosões do odontóide com subluxação atlantoaxial vertical (imagem). Nenhum dos doentes foi submetida a punção lombar, objectivando-se rápida resolução da sintomatologia com terapêutica farmacológica com colchicina e/ou anti-inflamatório não esteróide e/ou prednisolona.
Conclusão: O reumatologista deverá considerar as síndromes associadas a calcificação dos ligamentos periodontóides no diagnóstico diferencial de cervicalgia aguda com síndrome inflamatório sistémico no doente idoso. O seu diagnóstico atempado pode evitar a realização de exames complementares e terapêuticas desnecessárias.

P199 – IMPACT OF DIFFERENT FORMULATIONS OF "PATIENT GLOBAL ASSESSMENT" ON REMISSION CLASSIFICATION BY DISEASE ACTIVITY INDICES IN RHEUMATOID ARTHRITIS

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Background: Patient global assessment (PGA) of disease activity is included in a large number of composite indices of disease activity and definitions of remission in Rheumatoid Arthritis (RA). However, the actual question is formulated in a variety of different ways according to the instrument considered.
Objectives: To evaluate how 6 different formulations of PGA affect patient estimates and impact upon disease activity and remission rates as assessed by 4 Disease Activity Indices.
Methods: Consecutive RA patients followed in a Rheumatology outpatient department were included in this cross-sectional study. Data collection comprised: 28 joint counts (tender and swollen), C-reactive protein (CRP) and six different PGA formulations. The chosen formulations were the ones stated in the: v1) Portuguese National Registry Reuma.pt, the locally used formulation; v2) ACR/EULAR provisional definition of remission (considered in this study as the "standard"); v3) CDAI and SDAI; v4) Disease Activity Score (DAS28) assessment of general health; v5) DAS28 assessment of disease activity (the currently used); v6) one, exploratory, developed by the investigators, including idiomatic cultural expressions. ACR/EULAR Boolean criteria, CDAI, SDAI, and DAS28-CRP(4v) were used to test how these 6 PGA formulations change the rates of remission. PGA differences were assessed by descriptive analyses (including patients with PGA ≤10 and ≤20mm) and Bland-Altman test.
Results: In total, 193 patients were included (82% female, mean (SD) age of 59 (13) years, mean disease duration of 12 (9) years and 31% under biologics). The average PGA ranged from 42.3 (25.3) to 48.1 (26.7)mm as measured in different formulations. The ACR/EULAR (v2) formulation yielded the largest proportion of patients scoring ≤10mm (16.1%), corresponding to a difference of up to 4.7 % versus other PGAs. Similar results were found for the ≤20 cut-off (Table 1).

By using different PGA's formulations the rates of remission calculated with different indices can vary between 4.7% and 6.7% (Table 2).

Bland-Altman chart confirmed the low agreement between ACR/EULAR formulation and the other PGA

TABLE 1. IMPACT OF DIFFERENT FORMULATIONS OF PGA ON PATIENTS' ANSWERS AND ON REMISSION RATES ACCORDING TO FOUR COMPOSITE INDICES (N=193)

	Descriptive statistics			Remission rates, n (%)			
PGA Formulation	Mean (SD)	PGA below ≤10 mm n (%)	PGA below ≤20mm n (%)	ACR/EULAR Boolean	SDAI	CDAI	DAS28 4vCRP
v1 Reuma.pt	47.5 (28.0)	26 (13.5)	43 (22.3)	19 (9.8)	32 (16.8)	33 (17.1)	97 (50.5)
v2 ACR/EULAR	43.5 (27.9)	31 (16.1)	48 (24.9)	25 (13.0)	36 (19.1)	39 (20.0)	100 (51.7)
v3 CDAI/SDAI	47.2 (25.9)	23 (11.9)	34 (17.6)	16 (8.3)	27 (14.1)	26 (13.5)	91 (47.3)
v4 DAS28-GH	42.9 (25.3)	27 (14.0)	42 (21.8)	20 (10.4)	29 (15.2)	33 (17.1)	99 (51.4)
v5 DAS28-DA	42.3 (25.3)	28 (14.5)	44 (22.8)	19 (9.8)	29 (15.2)	30 (15.5)	100 (51.7)
v6 Investigators	48.1 (26.7)	22 (11.4)	35 (18.1)	17 (8.8)	27 (14.1)	27 (14.0)	97 (50.0)
				Maximum difference within definition, n (%):			
				9 (4.7)	9 (4.7)	13 (6.7)	9 (4.7)

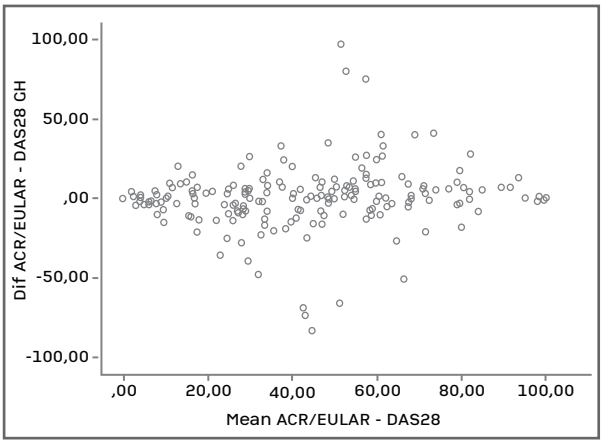

FIGURE 1. Bland-Altman plot for agreement between ACR/EULAR and DAS28 GH formulations. The middle line represents the mean of the difference, and the top and bottom lines demarcate 95% limits of agreement between the two formulations

formulations (p<.05), except for the DAS "general health" (p= .054) (Figure 1).

Conclusions: The use of different PGA formulations has clinical implications in disease activity, which, in turn, can influence therapeutic decisions. The establishment of a single standardised formulation seems warranted.

P19 – IS IMMUNOHISTOCHEMISTRY USEFUL TO PREDICT RESPONSE TO TREATMENT IN NECROTIZING MYOPATHIES?

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Background: Muscle biopsy is the gold standard for the diagnosis of inflammatory myopathies, but the role of immunohistochemistry in Necrotizing Myopathies (NM) has not been fully characterized yet.

Objectives: To determine if MHC-I expression and pattern of C5b-9 deposition in capillaries correlate with clinical phenotype and response to treatment in NM.

Methods: The Neuropathology Departmental database was searched to identify patients with a histological diagnosis of NM and follow up data for at least 6 months (30 patients). Electronic patient records were reviewed retrospectively to record demographics, autoantibodies, treatment, proximal muscle power at 3, 6 and 12 months by Manual Muscle Testing (MMT) (2), levels of CK and flares. Patients were classified as responders when there was improvement of MMT ≥20% and non-responders when MMT improvement was <20% (3). All biopsies were reviewed blindly by an experienced neuropathologist. MHC-I expression was classified as positive only if over expressed in all fibers. The patterns of C5b-9 deposition in endomysial capillaries were classified as specific (solid), non-specific (granular) or negative.

Results: MHC-I positive group (n=16/30) had a higher proportion of responders (62,5% *vs* 7,7%, p=0.002), higher number of patients with total recovery of mus-

cle power (66,7 *vs*. 15,4%) and were more commonly positive for autoantibodies (75% *vs*. 35.7%, p=0.030) when compared to the MHC-I negative group (n=14). 17 patients were positive for auto-antibodies of which 9 were myositis specific antibodies [SRP (n=6), HMG--CoA reductase (n=1), Jo-1 (n=1), P155/140 (n=1)] and 4 were myositis associated antibodies [Ro-52 (n=2), Ku (n=1), Pm/Scl (n=1)]. 13/30 patients had C5b-9 deposition, with a specific pattern in 5 and non-specific in 8. The specific pattern group had a greater reduction of CK after 6 months compared to non-specific and negative respectively (98% *vs*. 77% *vs*. 56.8%, p=0.006), greater reduction in CK after 12 months (96.6% *vs*. 68.9% *vs*. 59.6%, p=0.024) and higher rates of responders (80% *vs*. 60% *vs*. 18,8%, p=0.001). Six patients were on immunosuppressants (azathioprine/hydroxychloroquine, n=2), steroids (n=3) or both (n=1) for a minimum of 4 weeks when the biopsy was performed. Differences in age, gender, clinical features or treatment were not found to be statistically significant.

Conclusions: Upregulation of MHC I and solid staining pattern of C5b-9 in the capillaries of NM patients appears to be associated with a better outcome.

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P176 – REDUÇÃO DA DOSE DAS TERAPÊUTICAS ANTI-TNFA EM DOENTES COM ARTRITE REUMATÓIDE: ESTUDO TRANSVERSAL NA PRÁTICA CLÍNICA.

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Introdução: A artrite reumatóide (AR) é uma doença reumática inflamatória crónica e sistémica, que quando não tratada de forma adequada pode progredir originando dano estrutural com limitação funcional consequente. As terapêuticas biológicas constituíram um dos avanços mais importantes das últimas décadas no tratamento das artropatias crónicas como a AR; com a sua introdução, muitos doentes refratários a terapêuticas convencionais (DMARD s clássicos) responderam de forma adequada e entraram em remissão. No entanto, na prática clinica não é ainda consensual a atitude a tomar em doentes em remissão sustentada. Alguns estudos observacionais sugerem a possibilidade de reduzir a dose dos tratamentos biológicos em doentes em remissão ou baixa atividade sustentada até a dose mínima eficaz, maximizando a sua eficácia e minimizando os efeitos laterais.

Objetivos: Identificação de variáveis clínicas e analíticas associadas à redução da dose das terapêuticas anti--TNFα subcutâneas e sua manutenção sem recaída numa coorte de doentes com artrite reumatóide.

Materiais e métodos: Estudo transversal. Foram incluídos doentes com AR sob terapêuticas anti-TNFα subcutâneas (Etanercept, Adalimumab, Golimumab e Certolizumab pegol), seguidos no Serviço de Reumatologia do Hospital de La Santa Creu I Sant Pau (Barcelona, Espanha) e com capacidade para fornecer o consentimento informado para o estudo.

Variáveis analisadas: dados clínicos e demográficos gerais, tempo de seguimento, atividade da doença avaliada através do DAS28 3v, terapêuticas atuais e passadas para a AR, efeitos laterais a terapêuticas prévias.

Resultados: Foram incluídos 63 doentes com AR sob terapêuticas anti-TNFα subcutâneas; a maioria dos doentes era do sexo feminino (52 doentes - 82,5%) e a média de idades foi de 59,4±13,3 anos.

Identificámos 25 doentes (39,7%) que tinham sido sujeitos a uma redução da dose do tratamento biológico, em média 25,5 meses após o início do mesmo. Verificámos que neste grupo de doentes a idade média foi superior (p = 0,024), assim como a percentagem de DMARD s convencionais no início do tratamento biológico; o uso de glucocorticóides foi inferior. No grupo de doentes em que foi necessário voltar a aumentar a dose do anti-TNFα verificámos que a percentagem de positividade para o FR e anti-CCP era inferior em relação aos doentes que mantiveram doses mais baixas.

Em relação aos efeitos laterais das terapêuticas, não foram verificadas diferenças entre os doentes que diminuíram dose e os que não diminuíram.

Conclusão: A redução da dose dos medicamentos biológicos anti-TNFα subcutâneos é comum nesta coorte

de doentes com AR, tendo sido realizada em praticamente 40% dos doentes. Uma idade superior, assim como o uso concomitante de DMARD s clássicos no início do tratamento biológico parecem ser fatores que se associam a uma maior taxa de sucesso na redução e manutenção da dose dos medicamentos biológicos anti-TNFα subcutâneos analisados.

P10 – EARLY ARTHRITIS INDUCES DISTURBANCES AT BONE NANOSTRUCTURAL LEVEL REFLECTED IN DECREASED TISSUE HARDNESS.

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Introduction: Arthritis induces joint erosions and skeletal bone fragility.
Objectives: The main goal of this work was to analyze the early arthritis induced events at bone tissue level.
Methods: Eighty-eight Wistar rats were randomly housed in experimental groups, as follows: adjuvant induced arthritis (N= 47) and a control healthy group (N= 41). Rats were monitored during 22 days for the inflammatory score, ankle perimeter and body weight and sacrificed at different time points (11 and 22 days post disease induction). Bone samples were collected for histology, micro-CT, 3-point bending, nanoindentation and Fourier transformed infrared spectroscopy (FTIR) analysis. Blood samples were also collected for bone turnover markers and systemic cytokine quantification.
Results: At bone tissue level, measured by FTIR analysis and nanoindentation, there was a reduction of the mineral and collagen content and of hardness in the arthritic group, associated with an increase of the ratio of bone concentric to parallel lamellae and of the area of the osteocyte lacuna. In addition, increased bone turnover and changes in the microstructure and mechanical properties were observed in arthritic animals, since the early phase of arthritis, when compared with healthy controls. Conclusion: Arthritis induces very early changes at bone tissue level characterized by decreased tissue hardness and of collagen and mineral content. These observations highlight the pertinence of immediate control of inflammation in the initial stages of arthritis.

GRUPO 10

P78 – TRANSLATION AND CROSS-CULTURAL ADAPTATION INTO EUROPEAN PORTUGUESE LANGUAGE OF THE COPING INSTRUMENT – CORS (OMGAAN MET REUMATOÏDE ARTRITIS)

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Background: Inflammatory rheumatic diseases (IRD) are common conditions characterized by periods of exacerbations and remissions. The main symptom of IRD is pain. Patient education programs have become a complement to traditional medical treatment and have given people strategies to cope with pain. Omgaan met Reumatoïde Artritis (CORS), developed in the Netherlands, evaluates different strategies to cope with pain in patients with Rheumatoid Arthritis (RA).
Objective: The aim of this study was to perform the translation and cultural adaptation of the CORS questionnaire into European Portuguese; test the conceptual equivalence (clarity, comprehension, cultural relevance and appropriateness of the items and words used) of

the translated version in the Portuguese context.
Material and methods: The CORS was firstly translated into European Portuguese and then back-translated into Dutch, following the international guidelines for this procedure. After the review of the European Portuguese version by an expert committee, the pre-final version of the questionnaire was evaluated by cognitive debriefing interviews with an heterogeneous sample of patients with IRD regarding their gender, age, disease duration, and educational background.
Results: Translation into Portuguese and then back translation into Dutch were well succeeded and accepted by the authors before the cognitive debriefing. A total of 9 patients with IRD [5 female, median [IQR] age 55 [39-62,5] years] participated in the field test. Median of Education level [IQR] was 12 [9-15] years; at the time of the questionnaire 3 were retired, 2 on sick leave, 1 unemployed and 3 active workers. Median [IQR] time to respond the questionnaire was 9:30 [7:30, 10:45] minutes. All the participants read the instructions before the questionnaire and verified whether all issues were met. In general, all questions were equal in terms of time consumption. Cognitive debriefing showed that all the items were clear, relevant, understandable, easy to complete and culturally appropriate. As a result of the cognitive debriefing, minor changes, like the introduction of a response option "not applicable", were adopted for some questions to improve their appropriateness.
Conclusions: This study presents the first stage of the cultural adaptation process. Before CORS-PT can be fully implemented into the clinical and research settings in Portugal, its reliability, construct validity and responsiveness need to be evaluated in patients with inflammatory rheumatic diseases. The CORS may have potential to measure coping with the disease not only in rheumatoid arthritis, but in IRD in general.

P13 – ASSOCIATION OF VITAMIN D STATUS WITH RHEUMATOID ARTHRITIS DISEASE ACTIVITY AND UV INDEX

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Background: Lower serum vitamin D levels have been shown to be associated with various autoimmune disorders, including Rheumatoid Arthritis (RA). Vitamin D deficiency is common in RA patients, despite profiting from a sunny country.
Objectives: The aim of the study is to evaluate (1) - the association between vitamin D serum levels and disease activity in patients with RA; (2) – seasonal distribution of vitamin D levels.
Methods: Patients fulfilling the 2010 EULAR/ACR Rheumatoid Arthritis Classification Criteria, which had serum vitamin D [25(OH)D3] levels measured between January 2013 and December of 2016 were included. Demographic data, disease activity scores, including DAS283v-CRP and DAS283v-ESR, vitamin D supplementation with cholecalciferol and other therapeutic approaches were recorded. Vitamin D insufficiency was considered between 25-75 nmol/L and deficiency if <25 nmol/L. According to the national agency for the study of sea and atmosphere, UV Index levels were grouped into low UV Index 3-6 (October to April) and high UV Index 9-10 (May to September). Correlation between variables was analyzed using Spearman s rho.
Results: A sample composed by 95 patients, 79 females (83.16%), with an average age (SD) of 68.57 (11.92) years within 40-88 years range were included. Average disease duration was 13.46 (11.41) years. The average age at diagnosis was 57.10 (14.25) years. The average vitamin D levels were 78.13 (60.98) nmol/L in

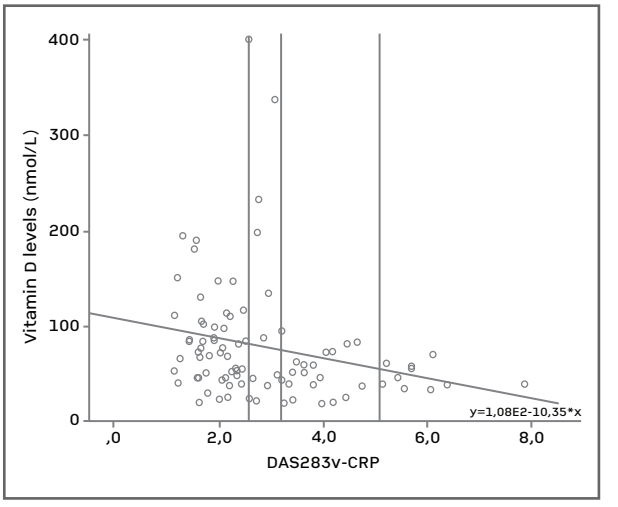

FIGURE 1. Bland-Altman plot for agreement between ACR/EULAR and DAS28 GH formulations. The middle line represents the mean of the difference, and the top and bottom lines demarcate 95% limits of agreement between the two formulations

a range between 20-400 nmol/L. Vitamin D levels were not significantly different in male *vs*. females patients. The prevalence of vitamin D insufficiency and deficiency was 53.68% and 8.42% respectively, despite 57.89% of the patients taking supplementation (average 6141 (4800) UI/week). The univariable analysis showed that albeit vitamin D levels presented a negative poor correlation with DAS283v-CRP (rho=-0.348, p-value<0.001) and DAS283v-ESR (rho=-0.271, p-value<0.01), there was a direct reduction in dispersion of the vitamin D values for increasing values of DAS283v--CRP and ESR. It was observed that vitamin D levels increase with patient age and decrease with disease duration. Seasonality and supplementation didn't affect vitamin D levels in our population.

Conclusions: Vitamin D insufficiency/deficiency was frequent among RA patients (62.1%), independently of seasonality or supplementation. An interesting pattern behavior was observed in this study, which indicates that the likelihood of encountering a very narrowband of vitamin D values for patients with high disease activity is very high, and thus, the forecast capability of vitamin D values for patients with increasingly active disease is quite good. Future research will aim at strengthening the statistical parameters of relevance, identifying and characterizing the more specific behaviors of this global pattern.

Disclosure of Interest: None declared

P208 – AS VÁRIAS FACES DA SÍNDROME SICCA

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Introdução: A sindrome sicca é referida pelos doentes seguidos na consulta de Síndrome de Sjögren (SSP), independentemente da identificação dos critérios de classificação para SSP. Entre os doentes com Síndrome sicca não-Sjögren, aqueles com positividade isolada para anticorpos anti-nucleares e manifestações de doença reumática imunomediada, como artrite/artralgias, fenómeno de Raynaud, fotossensibilidade ou leucopenia, são habitualmente diagnosticados como conetivite indiferenciada1 (UCTD). Admite-se que alguns destes doentes possam evoluir para SSP, enquanto outros manterão o quadro clínico estacionário.

Objetivos: Pretendeu-se avaliar as caraterísticas clínicas e laboratoriais de uma população seguida numa consulta de SSP/Síndrome sicca.

Métodos: Incluíram-se 119 doentes, dos quais 54 com SSP (critérios AECG) - 22 com >10 anos de diagnóstico (SSP>10 anos) e 32 com <2 anos de diagnóstico (SSP<2 anos), e 65 doentes com sindrome sicca não--Sjogren - 35 com UCTD (sicca-UCTD) e 30 sem UCTD(sicca-nUCTD). Recolheram-se dados demográficos, manifestações clínicas e laboratoriais. Realizou--se sialometria, teste de Schirmer I, teste de quebra lacrimal (BUT, "break-up time") e avaliação de queratite.

Resultados: Os doentes com SSP>10 anos apresentavam idade de diagnóstico inferior, menor fluxo salivar, e maior frequência de queratite e redução do BUT, em relação aos doentes com SSP recente (Quadro 1). A presença de SSA, ANA e FR foi mais prevalente nos SSP evoluídos do que nos precoces. Doentes com SSP>10 anos apresentavam também maior ocorrência de manifestações articulares, hematológicas, fenómeno de Raynaud e outras manifestações sistémicas, quando comparados com doentes com SSP<2 anos.

Ao analisar os doentes sem critérios de SSP, verificou-se que o grupo sicca-UCTD apresentava maior prevalência de manifestações articulares, cutâneas, hematológicas e fenómeno de Raynaud, em comparação com o grupo sicca-nUCTD. O estudo funcional não apresentava diferenças significativas entre ambos os grupos, excepto maior frequência de queratite no grupo sicca-nUCTD.

Discussão: Nos doentes com SSP, o perfil clínico mais grave pertencia sobretudo ao grupo SSP>10 anos. Este fato pode dever-se quer ao aparecimento de novas manifestações, relacionadas com a evolução da doença, quer à maior retenção na consulta dos doentes graves e ao abandono gradual do seguimento de doentes ligeiros.

Em relação à caraterização funcional salivar e lacrimal, era esperado o acentuado compromisso no grupo SSP>10 anos, quando comparado com os restantes grupos, que pouco diferem entre si.

Em relação aos doentes com sindrome sicca não-Sjögren, a utilização do ANA ≥1/320 como indicador de conetivite traduz-se na divisão desta população em 2

grupos: o grupo UCTD e o grupo não-UCTD. O primeiro apresentava maior ocorrência de manifestações articulares, hematológicas, cutâneas e fenómeno de Raynaud. Inclusivé, o grupo sicca-UCTD apresentava maior ocorrência de artrite/artralgias e fenómeno de Raynaud que o grupo SSP<2 anos, embora com menor ocorrência de alterações hematológicas.

Conclusões: Parece ser evidente que a aplicação dos critérios atuais de classificação da PSS na prática clínica não é satisfatória, pois excluem muitos doentes com manifestações clínicas relevantes, dos quais alguns terão provavelmente SSP. É necessário identificar novos biomarcadores para auxílio no diagnóstico e decisão terapêutica de doentes com Síndrome seca, dado que a dicotomia Sjögren *versus* não-Sjögren, promovida pelos critérios atuais, parece refletir a divisão artificial de um contínuum clínico e imunológico.

P87 – NEUROPATHIC PAIN: ASSOCIATION WITH SKIN THICKNESS IN SYSTEMIC SCLEROSIS PATIENTS

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Background: Systemic Sclerosis (SSc) is a connective tissue disorder characterized by fibrosis of skin and internal organs, vasculopathy and systemic inflammation. To date, few studies assessed pain in SSc patients,(1) namely the neuropathic component. Data is also scarce on defining possible neuropathic pain (NP) predictors in these patients.

Objectives: To determine if patients with SSc have a higher prevalence of NP compared with a group of age and sex matched controls and study possible associations between NP and SSc clinical variables.

Methods: The study evaluated patients diagnosed with SSc fulfilling the SSc classification criteria of the American College of Rheumatology (ACR), older than 18 years old and followed up at our Rheumatology Unit. Forty-eight patients with mean age of 56.98 ± 12.73 years and mean disease duration of 9.77 ± 6.12 years were included. Comparison group comprised 45 age and sex matched controls. Patients and controls were consecutively evaluated at our Unit and NP in 4 questions questionnaire (DN4) was used for assessing the presence of NP. In SSc patients, skin involvement was also evaluated clinically by the modified Rodnan skin thickness score (mRSS) ranging from 0 to 51. Hand mobility (HAMIS) and SSc Severity Scale (SScSS) were also calculated and relevant clinical variables of the disease were collected. Parametric and nonparametric tests were used for comparative analysis. Multivariate logistic regression was used to identify factors associated to NP. Statistical significance was defined as $P < 0.05$.

Results: In our study, prevalence of NP assessed by DN4 was significantly higher in SSc patients comparative to controls (56.2% versus 13.3%, p<0.001). In addition to age and sex, presence of diabetes (p=0.541) was also similar in both groups. In SSc group, patients with and without NP showed some statistically significant differences (table 1). Multivariate logistic regression revealed that only mean mRSS (odds ratio [OR] = 1.90, 95% confidence interval [CI] 1.01 to 3.55, p=0.045) was independently associated with the presence of NP.

Conclusions: To the best of our knowledge, this is the first study evaluating the prevalence of NP in SSc patients in comparison with age and sex matched con-

TABLE. COMPARATIVE ANALYSIS BETWEEN SSC PATIENTS WITH AND WITHOUT NP

	NP positive patients (n=27)	No-NP patients (n=21)	P value
Median age, years (IQR)	61 (57-69)	52.38 (42.5-63.5)	0.032
Mean disease duration (years)	11.36 ± 6.55	7.73 ± 4.93	0.04
Diffuse/limited cutaneous subtype (n)	6/21	0/21	0.024
Mean mRSS	22.81 ± 8.74	7.57 ± 3.64	<0.001
Mean HAMIS	10.44 ± 6.16	1.52 ± 2.29	<0.001
Mean SScSS	10.00 ± 4.32	3.90 ± 2.07	<0.001
Digital ulcers n (%)	17 (63.0)	6 (28.6)	0.018
Calcinosis n (%)	15 (55.5)	6 (28.6)	0.062

trols. NP was significantly more prevalent in patients with SSc. Skin thickness assessed by mRSS was independently associated with the presence of NP.

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P118 – SÍNDROME DE SJÖGREN: CASUÍSTICA DE UM SERVIÇO DE REUMATOLOGIA E AVALIAÇÃO DA ATIVIDADE DA DOENÇA APLICANDO O ESSDAI

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Introdução: O Síndrome de Sjögren Primário (SSP) é uma doença inflamatória crónica sistémica caracterizada por infiltração linfocítica das glândulas exócrinas. As principais manifestações são xerostomia e xeroftalmia. No entanto, o espectro clínico estende-se desde o envolvimento das glândulas até ao envolvimento sistémico, com prognóstico variável. Tal como noutras doenças do tecido conjuntivo também para o SSP foram desenvolvidos instrumentos de avaliação da atividade da doença. Desde 2009 o ESSDAI, um instrumento validado, composto por 12 domínios, tem sido utilizado como Gold Standard para avaliação da atividade da doença nesta patologia. Este trabalho teve como objetivo analisar as características demográficas, o espectro clinico, a terapêutica e avaliar a atividade da doença de doentes com SSP, seguidos num Serviço de Reumatologia.

Material e Métodos: Foram obtidos dados dos processos clínicos, cartas de alta e registo do reuma.pt de doentes seguidos no nosso serviço com SSP, segundo os critérios de classificação do Consenso Americano-Europeu (AECG) de 2002. A informação recolhida incluiu dados demográficos, manifestações clínicas e serológicas, terapêutica imunossupressora e atividade da doença, aplicando o ESSDAI.

Resultados: Foram incluídos no estudo 70 doentes que cumpriam os critérios AECG de 2002, dos quais 1 era do sexo masculino e 69 do sexo feminino. A idade média foi de 56,49 anos ± 13,20 DP. As manifestações sistémicas mais frequentemente observadas foram linfopenia (37,1%), artrite (35,7%), neutropenia (20,0%), anemia (14,3%), trombocitopenia (10,0%), púrpura (4,5%), livedo reticular (4,5%), doença pulmonar intersticial (3,0%), nefrite intersticial (3,0%) e hepatite auto-imune (2,9%).

Como terapêutica imunossupresora, 22 doentes encontravam-se sob Hidroxicloquina, 17 com Corticoide, 3 com Metotrexato, 2 com Micofenolato de Mofetil, 2 com Azatioprina e 1 com Dapsona. A maioria dos doentes (55,7%) não apresentava atividade da doença (ESSDAI =0), 32,9% apresentava ligeira atividade (ESSDAI=1-4), 10,0% atividade moderada (ESSDAI=5-13) e 1,4% atividade elevada (ESSDAI14).

Conclusões: O SSP é uma doença que pode apresentar um envolvimento sistémico grave, podendo atingir variados órgãos e sistemas com prognóstico variável. A aplicação de scores de gravidade, como o ESSDAI, na prática clinica diária permite, de forma objetiva e uniformizada, fazer uma avaliação da atividade da doença e facilita o seguimento destes doentes ao fornecer um conjunto de parâmetros de avaliação, contribuindo para uma conformidade nas atitudes e decisões clínicas entre médicos.

P197 – USTEKINUMAB NO TRATAMENTO DA ARTRITE PSORIÁTICA EM DOENTES COM PSORIASE MODERADA A GRAVE. EXPERIÊNCIA DE UM CENTRO.

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Introdução: A artrite psoriatica é uma doença reumática crónica que se caracteriza pela presença de sinovite, dactilite, entesite e espondilite.

O Ustekinumab é um dos fármacos biológicos usado no tratamento da Artrite Psoriatica após a sua aprovação para o tratamento da Psoríase moderada a grave. É um inibidor da IL12/IL 23p40 que suprime a ativação Th1, Th17 e Th22.

Métodos: Estudo retrospectivo e observacional cujo objectivo principal é identificar as manifestações da Artrite psoriatica e a evolução desta patologia numa cohort de doentes com psoriase grave tratados com ustekinumab, nos últimos 5 anos, num período mínimo de 3 meses. Foram avaliadas e comparadas as populações com psoríase e com artrite psoriatica assim como se identificou a taxa de retenção com este fármaco e as razões para A SUA descontinuação.

Resultados: Foram identificados 42 doentes com psoríaiase tratados com ustekinumab e 14 doentes com artrite psoriática (apenas 8 doentes tinham o diagnóstico e eram observados em consulta de Reumatologia). A taxa de retenção no fármaco foi de 58% e a principal causa de descontinuação foi a falta de eficácia cutânea (4 doentes) e articular (2 doentes). A suspensão por efeitos laterais foi reduzida (4 doentes). Um doente com artrite psoríatica que suspendeu por falta de eficácia já tinha realizado 3 fármacos anti TNF alfa.
Limitações: O número reduzido de doentes com artrite psoriatica e que descontinuaram.
Conclusão: O Ustekinumab demonstrou eficácia e segurança no tratamento da Artrite psoríatica e psoríase grave

P72 – TRATAMENTO PRÉVIO COM BIFOSFONATOS: ALTERA O EFEITO DA TERIPARATIDE?

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Introdução: A teriparatide é utilizada como tratamento na osteoporose. Ela é reservada às formas severas. Recentemente, levantam-se questões sobre o efeito do uso prévio de bifosfonatos (BF) no metabolismo ósseo em doentes sob teriparatide.
Objetivo: Avaliar a influência do tratamento prévio com BF na efetividade de teriparatide.
Métodos: Estudo observacional de 68 doentes tratados com teriparatide por osteoporose do nosso serviço de Reumatologia. Os doentes foram classificados em 2 grupos: A- doentes previamente tratados com BF por período > 6meses e B- doentes sem exposição prévia a BF ou <6 meses de tratamento. Avaliamos os valores da densidade mineral óssea (DMO) na coluna vertebral lombar (CL), cólo femural (CF) e fémur total (FT) aos 0 e 18 meses, e os marcadores de remodelação óssea aos 0, 3 e 18 meses. Para análise estatística foram utilizados testes paramétricos e não paramétricos (SPSS 20,0). O nível de significância foi fixado em 0,05.
Resultados: Nós observamos 42 doentes no grupo A, todos do sexo feminino e 26 doentes no grupo B, 81% eram mulheres. As populações eram comparáveis quanto à idade. O bifosfonato mais utilizado foi o alendronato (52,4%), seguido de risedronato (23,8%), pamidronato (11,9%), ibandronato (7,1%) e acido zoledrónico (4,8%). O período médio de tratamento com BF foi de 40 ± 35 meses. No grupo A, 28,6% sofriam de osteoporose primária e 71,4% tinham osteoporose secundária. 57,1% dos doentes apresentavam T-score <-3 e fraturas vertebrais e 14,3% um T-score lombar <-4. No grupo B, 53,8% dos doentes tinham osteoporose secundária. 42,3% iniciaram teriparatide devido a T-score <-3 e fraturas vertebrais e 50% por *T-score* lombar <-4. No início do estudo, no grupo A a mediana da DMO na CL, CF e FT foi de 0,848, 0,685 e 0,749 g/cm2 e no grupo B foi de 0,708, 0,565 e 0,652 g/cm2, respetivamente. No fim dos 18 meses, constatou-se uma resposta analítica e densitométrica para as três regiões estatisticamente significativa no grupo B. No grupo A, houve um aumento significativo dos biomarcadores e da DMO somente na CL. Na comparação entre os dois grupos, verificaram-se diferenças estatisticamente significativas na variação na DMO (p<0,001, p=0,016, p=0,028) e no ganho percentual (p<0,001, p=0,010, p=0,016) na CL, CF e FT respetivamente, a favor do grupo B. Verificou-se um aumento dos marcadores de remodelação óssea durante o tratamento, mas não houve diferenças estatisticamente significativas nas suas variações aos 3 e 18 meses entre os dois grupos. No entanto, em geral, os valores de *Beta Crosslaps* (β-CTX) e osteocalcina foram menores no grupo A.
Discussão: O grupo B tinha uma DMO inicial inferior ao grupo A e uma percentagem mais elevada de doentes com *T-score* <-4. No entanto, as variações da DMO foram significativamente superiores no grupo B aos 18 meses e verificaram-se para as três regiões, em contraste com o grupo A com uma resposta apenas na CL.
Conclusão: Os nossos dados parecem sugerir que o uso prévio de BF reduz o efeito de teriparatide, sobretudo no colo femoral e fémur total. Mais estudos são necessários para confirmar estes resultados.

P71 – TERIPARATIDE NA OSTEOPOROSE: EFEITO INDEPENDENTE DA IDADE

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Introdução: Em países em que o envelhecimento populacional é uma realidade, é expectável que a osteoporose e o risco de fratura venham a aumentar. A teriparatide é um agente anabólico disponível para o seu tratamento. No entanto, existem poucos estudos sobre a sua eficácia em doentes idosos.
Objetivo: demonstrar se a resposta ao tratamento com

teriparatide difere com a idade.
Métodos: Estudo observacional de doentes tratados com teriparatide por osteoporose do nosso serviço de Reumatologia. A colheita de dados foi obtida a partir dos registos hospitalares. As características demográficas, clínicas, analíticas e densitométricas foram comparadas entre 2 grupos atendendo à idade de início de tratamento: ≥70 anos (grupo 1) e <70 anos (grupo 2). A resposta ao tratamento foi avaliada pelos valores da densidade mineral óssea (DMO) na coluna vertebral lombar (CL), fémur total (FT) e cólo femural (CF) no início e ao fim de 18 meses e pela determinação de Beta *Crosslaps* (β-CTX), osteocalcina (OC) e fosfatase alcalina (FA) aos 0, 3 e 18 meses. O teste de chi2, teste de *Fisher* e de *Mann-Whitney* foram utilizados para a análise estatística (SPSS 20.0). O nível de significância foi fixado em 0,05.
Resultados: Um total de 74 doentes foram incluídos, 23 no grupo 1 e 51 no grupo 2. As populações eram comparáveis em relação ao sexo, à presença de osteoporose primária ou secundária e às indicações terapêuticas. Na DMO inicial os valores na CL foram similares entre os 2 grupos, mas a nível do FT e CF os doentes com ≥ 70anos apresentaram uma mediana inferior. No total, 98,5% das mulheres encontravam-se na pós-menopausa. No grupo 1, a idade média no início do tratamento foi de 75,96 anos (máx:84) e 87% eram mulheres. 52,2% deste grupo tinham osteoporose primária e 47,8 % sofriam de osteoporose secundária. Quanto às indicações de tratamento, 60,9 % tinham um *T-score* <-3 e fraturas vertebrais, 30,4 % um *T-score* <-4 e 8,7% iniciaram teriparatide por intolerância ou falência a bifosfonatos. No grupo 2, a idade média no início do tratamento foi de 60,49 anos (mín:29) e 96,1% eram do sexo feminino. Nestes doentes, 70,6% tinham osteoporose secundária. A instituição terapêutica justificou-se por *T-score* <-3 e fraturas vertebrais em 49% dos doentes, *T-score* <-4 em 21,6% e por intolerância ou falência a bifosfonatos nos restantes. Após o tratamento, a variação mediana da DMO no grupo 1 foi de 0,077 g/cm2 na CL, 0,004 g/cm2 no FT e 0,035g/cm2 no CF e no grupo 2 de 0,086 g/cm2, 0,0125 g/cm2, 0,045g/cm2, respectivamente. Não se verificaram diferenças estatisticamente significativas entre os grupos quanto as alterações da DMO para as três regiões. O aumento dos marcadores ósseos foi similar entre os dois grupos.
Discussão: Esta análise revelou que o grupo de doentes mais idosos apresentou um ganho na DMO e um aumento dos biomarcadores semelhante ao grupo 2. Mais estudos são necessários para avaliar a utilidade e perfil de segurança da teriparatide em doentes para além da 8ª década de vida.
Conclusão: O nosso estudo demonstra que a eficácia da teriparatide não parece depender da idade, podendo ser considerado em doentes mais velhos.

GRUPO 11

P161 – ACTA REUMATOLÓGICA PORTUGUESA: THE RHEUMATOLOGISTS' PERSPECTIVES IN 2017

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Introduction: Acta Reumatológica Portuguesa (ARP) is

the official scientific organ of the Portuguese Society of Rheumatology. In order to understand the interests and perspectives of the Portuguese rheumatology community regarding the use of ARP journal, namely its structure, divulgation strategies and of ARP website, a dedicated study based on an online survey was performed.
Methods: A 12-item online questionnaire with questions focusing on how and how often do rheumatologists access ARP, both in its printed and online versions; how much of the these versions are accessed; the main reasons to access ARP website; what are the most relevant types of published articles; how do rheumatologists prefer to receive ARP (printed *vs* online versions), among others; was developed and sent by email to all Portuguese Rheumatologists registered in the Portuguese Society of Rheumatology.
Results: A total number of 100 rheumatologists replied to this survey, representing 45% of all registered members (220). Considering the actually available printed and online versions of ARP, 45% of responders considered accessing both versions, while 31% exclusively consult the online version. The majority of the responders (77%) read some of the ARP online articles, while 58% reported reading some articles of the printed version. A higher percentage of rheumatologists never consult the printed version (22%) in comparison with never consulting the online version (9%). Regarding the frequency of accessing printed and online ARP versions, 37% and 36% refers doing it occasionally, and 27% and 34% monthly, respectively.

In what concerns the most relevant type of articles published in ARP the reviews, clinical practice and images in Rheumatology were those considered being of higher interest (3.8, 3.7 and 3.7, respectively in a 1 to 5 rating scale) followed by clinical cases (3.5), original articles (3.5), editorials (3.4) and letters to the Editor (3.2). Accessing the ARP website is mainly motivated by the search of a specific article (71%) or an update of the published literature (62%), while 43% access the ARP website as reviewers and 31% as submitting authors. The majority of the rheumatologists expressed their preference to receive the digital version of ARP by e-mail (56%), while 13% still prefers the printed version and 31% would like to receive both.
Conclusions: The online version of ARP is being well accepted by Portuguese Rheumatologists. Reviews, clinical practice and images in Rheumatology are the articles considered of higher interest.

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P50 – EFEITO DA TERAPÊUTICA BIOTECNOLÓGICA NAS MANIFESTAÇÕES EXTRA-ARTICULARES NA ESPONDILITE ANQUILOSANTE

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Introdução: O tratamento com terapêutica biotecnológica (infliximab, etanercept, adalimumab, golimumab e certolizumab pegol) na espondilite anquilosante (EA) é efetivo. No entanto, a evidência acerca da potencial eficácia destes medicamentos anti-TNF nas manifestações extra-articulares da espondilite anquilosante, nomeadamente em relação à uveíte (UV), doença intestinal inflamatória (DII) e dactilite é escassa.
Objetivos: Analisar qual a potencial eficácia da terapia biotecnológica aprovada para a EA na UV, DII e dactilite associadas a esta patologia em comparação com o placebo.
Métodos: Foi realizada uma revisão sistemática da literatura usando as bases de dados *PubMed* e *Cochrane Library*. Estudos aleatorizados controlados (EAC), meta-análises e estudos observacionais (EO) acerca da temática em estudo foram pesquisados.
Resultados: Cinquenta estudos foram incluídos (dezassete EAC, seis meta-análises e vinte e sete EO). Dos EAC obtivemos os resultados relativamente à UV e DII apresentados na Tabela 1. Nenhum dos estudos apresentou resultados relativamente à dactilite. Das meta-análises incluídas apenas uma apresenta resultados. Demonstrando que incidência de uveíte é menor nos pacientes sob terapia com etanercept do que com placebo (incidência de 8,6 e 19,3 por 100 pacientes por ano, respetivamente; p value= 0,03). Em EO que compararam diferentes fármacos concluímos, num o risco de desenvolver uveíte foi 1,9 vezes maior nos pacientes sob etanercept em comparação com aqueles sob adalimumab (p value= 0.0223) e um risco semelhante ao infliximab. Noutro temos uma percentagem maior de pacientes com eventos de uveíte sob etanercept (8,0%) durante o seu decurso do que com infliximab (4,0%). Nos EO, a percentagem de pacientes com even-

TABELA I. PERCENTAGEM DE PACIENTES COM EVENTOS DE UVEÍTE OU DOENÇA INTESTINAL INFLAMATÓRIA EM ESTUDOS ALEATORIZADOS CONTROLADOS

	Estudos aleatorizados controlados	
	% pacientes com eventos sob terapia	% pacientes com eventos sob placebo
Uveíte		
Infliximab	2,9	8,6
Etanercept	1,1	3,5
Adalimumab	Sem resultados	Sem resultados
Golimumab	Sem resultados	Sem resultados
Certolizumab pegol	0,9	2,8
Doença Intestinal Inflamatória		
Infliximab	Sem resultados	Sem resultados
Etanercept	1,1	0,7
Adalimumab	1,0	0,0
Golimumab	Sem resultados	Sem resultados
Certolizumab pegol	0,0	0,9

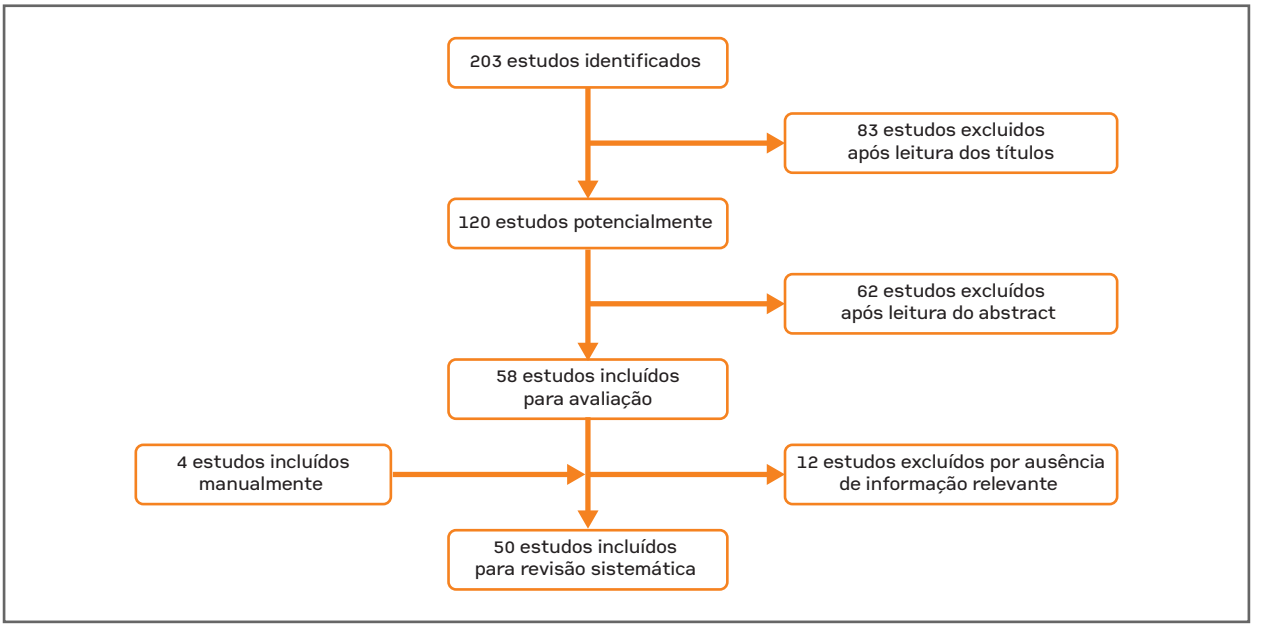

FIGURA. Descrição de método

tos de UV com infliximab foi entre um intervalo de 0,0%-3,1% com um intervalo de tempo de seguimento entre 2 anos a 5 anos; com etanercept entre um intervalo de 0,9%-29,6% e um intervalo de tempo de seguimento entre 12 semanas a 7 anos; com adalimumab apenas um estudo com a duração de 2 anos com 3,9% de pacientes com eventos de uveíte. Relativamente à percentagem de pacientes com eventos de DII em EO sob o fármaco etanercept o intervalo foi de 3,7% a 7,7% e um tempo de seguimento entre 3,2 anos e 7 anos; com adalimumab apenas um estudo com a duração de 2 anos com 0,6% de pacientes com eventos de DII. Dada a escassez de estudos foi impossível obter dados de todos os fármacos.

Conclusões: A eficácia da terapêutica anti-TNF está sub-reportada em EAC. As informações disponíveis sugerem a possível eficácia de infliximab, adalimumab e certolizumab pegol na UV associada à EA, e do

certolizumab pegol na DII. Não há evidencia disponível acerca da eficácia da terapia anti-TNF na dactilite associada à EA. Estudos futuros com terapia anti-TNF deverão reportar mais evidência acerca das manifestações extra-articulares da espondilite anquilosante.

P202 – OVEREXPRESSION OF A NERVE REGENERATION PROTEIN IMPROVES NOCICEPTIVE BEHAVIOUR IN EXPERIMENTAL OA

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Osteoarthritis (OA) remains a major cause of pain and disability and its treatment an important clinical concern. Its aetiology is far from being completely understood, but recent evidence has pointed for the existence of a possible phenomenon of peripheral nerve injury, at least in a subset of patients, which may be responsible for the ineffectiveness of treatments based on inflammatory drugs.

Therefore, in this study we aimed at studying the effect of increasing the expression of a regeneration associated protein (the small proline rich protein 1A -SPRR1A) in an experimental model of OA.

For this purpose, a viral vector engineered to express SPRR1A was injected intra-ganglionically in OA and control animals and the effect of this overexpression on the nociceptive behaviour was evaluated through the von Frey, CatWalk and Knee-Bend tests at several time-points.

Preliminary data suggests that increased expression of this regeneration protein provokes an attenuation of mechanical allodynia and movement- and loading-induced nociception in OA animals.

This observation raises the possibility that overexpression of SPRR1a could be targeted to facilitate regeneration and functional recovery of peripheral nerves damaged at the joint, and a thus a potential target in OA.

P205 – WHAT IF WE CONSIDER THE PHYSICIAN VISUAL ANALOGUE SCALE INSTEAD OF PATIENT IN CALCULATING CDAI AND SDAI IN A BIOLOGIC POOL OF RA PATIENTS?

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Introduction: In the last years there is a trend to consider CDAI and SDAI as a gold standard (with DAS score) in the follow up of rheumatoid arthritis patients. This two scales are easier to calculate and are currently used in clinic as well as in research. However the VAS from patient, as well as physician play an important role in the overall score. In our clinical practice we have the clear notion that patient trend to score more than physicians in the global disease VAS score.
Objectives: To determine the difference from SDAI and CDAI if we replace the patient VAS for the Physician; to determine CDAI/SDAI response considering the patient and the physician score.
Methods: Patients with RA were selected in our local pool of patients from Reuma.pt on biologics with two evaluations T0 (beginning of biologic) T12 (one year on biologic +/- 2 months). We consider the CDAI and SDAI and created a physician version (replacing patient by physician VAS). General clinical and demographic data were obtained.
Results: 154 patients were selected, mean age 59.9±11.6, mainly female (89.6%) with rheumatoid factor and/or CCP + (84.8%), most of them on a TNF inhibitor (95,5%).
Conclusion: We found that the patient VAS influences negatively the response to biologics in comparison with the use of physician VAS. This may suggest that the self-evaluation from the patient should be trained and explained to the patient in order to be less different

TABELA. CDAI E SDAI: PATIENT VS. PHYSICIAN, IN T0 AND T12; REMISSION

	Patient	Physician	P	% of remission
T0	CDAI T0 29.7±12.3	CDAI T0 Physician 28.7±12.5	<0.0001*	
	SDAI T0 31.9±13.0	SDAI T0 Physician 30.9±13.3	<0.0001*	
T12	CDAI T12 11.6±10.1	CDAI T12 Physician 10.4±9.9	<0.0001*	Patient: 28/152 (18.4%) Physician: 39/152 (25.7%)
	SDAI T12 12.5±10.4	SDAI T12 Physician 11.3±10.2	<0.0001*	Patient: 26/144 (18.1%) Physician: 37/144 (25.7%)

T-Test pairs and Wilcoxon related samples

from the physician evaluation.

P125 – PREVALÊNCIA E ASSOCIAÇÃO DE ANTICORPOS ESPECÍFICOS DE MIOSITE COM POLIMIOSITE E DERMATOMIOSITE

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Introdução: As miopatias inflamatórias idiopáticas (MII) constituem um grupo de doenças auto-imunes raras e que incluem a Polimiosite (PM), a Dermatomiosite (DM) e a Miosite por Corpos de Inclusão (MCI). O diagnóstico baseia-se em critérios clínicos, analíticos, eletromiográficos e histológicos. Adicionalmente, são identificados anticorpos específicos de miosite (MSA) (anti-Jo1, anti- PL7, anti-PL12, anti-Mi-2), os quais estão associados a um subtipo de MII, tornando-se úteis no diagnóstico e prognóstico da doença.
Objetivo: Determinar a prevalência dos MSA nos doentes com PM e DM, bem como a sua associação ao subtipo de MII.
Métodos: Foram avaliados retrospectivamente os doentes com PM e DM seguidos no Centro Hospitalar e Universitário de Coimbra entre Janeiro 1994 a Outubro 2014, identificando-se aqueles que apresentavam anticorpos específicos.
Resultados: Foram identificados 13 doentes com PM e 18 com DM numa cohort de 40 doentes com o diagnóstico de MII (os restantes doentes não foram incluídos nesta análise por não apresentarem nenhum destes subtipos de MII). Todos os doentes com PM eram do sexo feminino com idade média de 61,70 anos. Foram identificados anticorpos específicos de miosite em 76,92% (n=10) dos casos, sendo o mais frequente o Anti-Jo1 (46,15%; n=6). Dos doentes com DM, 55,55% eram do sexo feminino com idade média de 54 anos. Foram identificados anticorpos específicos de miosite em 16,67% (n=3) dos doentes com DM, sendo mais frequente o Anti-Mi2 (11,11%; n=2). Verificou-se uma relação estatisticamente significativa entre a presença de anticorpos específicos e o diagnóstico de PM (p=0,001).
Conclusão: Neste estudo verifica-se uma maior prevalência de anticorpos específicos de miosite nos doentes com PM e uma associação estatisticamente significativa entre este diagnóstico e a sua presença. Embora a sua presença não seja necessária para o diagnóstico, a sua determinação é útil pela sua elevada especificidade e pela sua maior associação à PM.

P37 – LUPUS ANTICOAGULANT: AN ANTIBODY POSSIBLY ASSOCIATED WITH SENSORINEURAL HEARING LOSS IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Introduction: Otological disorders have been reported as one of the manifestations of many autoimmune diseases, including systemic lupus erythematosus (SLE). Although the pathogenesis of SNHL in these patients remains unclear, several reports suggest an association with antiphospholipid antibodies.

Objectives: The aim of this study was to determine if the prevalence of SNHL is higher in SLE patients when compared to that of the general population and to evaluate potential factors contributing to it s pathogenesis. Methods: Thrirteen patients with SLE (ACR 1997 criteria) were evaluated for evidence of hearing abnormalities. An equal number of healthy, sex and age, matched subjects served as controls. Participants were asked about the presence of otological symptoms (hearing loss, tinnitus, vertigo and aural fullness) and subjected to a complete otorhinolaringological examination and audiological evaluation (pure tone and speech audiometry and tympanometry). Furthermore, the patient s immunological profile (anti-dsDNA antibodies, anti-cardiolipin antibodies, lupus anticoagulant and anti-beta2 glycoprotein 1 antibodies) was analysed. Disease activity was assessed using the SLEDAI index.
Results: The audiometric evaluation showed that 62% of SLE patients had SNHL, whereas in the control group only one individual (8%) had mild hearing loss. This difference was found to be statiscally significant ($p<0.05$).

In the patients group, with regard to the imunological profile, a tendentially significant association was noted between the existence of positivity to lupus anticoagulant and elevated pure tone average 4 ($p = 0.062$). None of the other antibodies showed a positive association with SNHL.
Conclusions: In our study, patients with SLE presented a significantly higher prevalence of SNHL compared to that of healthy controls from the same geographic area, matched by sex and age. This fact should be taken into account in the follow up of these patients so that hearing loss can be recognized as soon as possible.

Considering the tendentially significant association found between lupus anticoagulant positivity and elevated pure tone average, it can be hypothesized that this particular antibody could represent a risk factor for the development of SNHL in patients with LES.

Further studies are needed in order to evaluate the validaty of the abovementioned proposition.

P133 – LUMBAR MULTIFIDUS MYOFASCIAL STIFFNESS IN A HEALTHY YOUNGER ADULT POPULATION: A PILOT STUDY FROM THE MYOSPA PROJECT

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Background: The lumbar multifidus is the primary stabilizing spinal muscle. Its mechanical properties are hypothesized to be altered in several chronic diseases (e.g. adolescent idiopathic scoliosis and ankylosing spondylitis). Two techniques have been proposed to assess muscle stiffness using an external mechanical impulse, the MyotonPRO and ultrasound-based shear wave elastography (SWE).
Aims: To investigate in healthy, younger adults: (i) intra-observer reliability of the MyotonPRO and SWE measurements at the lumbar (L3-L4) level; (ii) correlation between MyotonPRO and SWE measurements; and, (iii) correlation between multifidus stiffness (assessed by both methods) and demographic variables.
Methods: Healthy subjects, 8 male and 9 female, (n=17, 18-50 years old) without previous spine surgery or disease were included; all of them with right side dominance. Dynamic stiffness of the multifidus was assessed using MyotonPRO (Myoton AS, Tallinn, Estonia) and an ultrasound scanner (Aixplorer, v10, Supersonic Imagine, Aix-en-Provence, France). Measurements were performed bilaterally on subjects, after 10 minutes lying prone on a table, initially and after a ten minutes. At baseline, MyotonPRO measurements were performed by one experienced operator (M1) at the L3-L4 spinous processes level and SWE (E1) were performed by another experienced operator at the same area (diameter 10mm and depth of 2cm). Ten minutes later 2 additional MyotonPRO measurements were performed – (M2) assessed at the same point used at baseline and (M3) assessed at another point identified by SWE MyotonPRO impulses induced 10 consecutive sets of muscle oscillations; measurements were per-

TABLE I. INTRA-OBSERVER RELIABILITY OF REPEATED MEASURES OF LUMBAR MUSCLE PROPERTIES ASSESSED BY MYOTONPRO AND SWE, IN BOTH LEFT AND RIGHT SIDES

	Myoton single measurements (M1, M2, M3). ICC (95% CI)
M1: left side	0.98 (0.95;0.99)
M1: right side	0.98 (0.94;0.99)
M2: left side	0.97 (0.88;0.99)
M2: right side	0.91 (0.69;0.98)
M3: left side	0.99 (0.96;1.00)
M3: right side	0.99 (0.98;1.00)
	Myoton average measurements (M1 and M2). ICC (95% CI)
M1M2: left side	0.96 (0.86;0.99)
M1M2: right side	0.92 (0.67;0.98)
	SWE measurements. ICC (95% CI)
E1: left side	0.94 (0.88;0.98)
E1: right side	0.74 (0.39;0.90)

formed twice in each evaluation. SWE shear modulus measurements were performed three times. Intra-observer reliability for both Myoton and SWE stiffness measurements was determined by intraclass correlation coefficient (ICC).

Correlation between the two techniques was determined using the Spearman's coefficient between the average of the measurements. Association between each technique's stiffness measurements with demographic variables was assessed by univariate regression.
Results: High intra-observer reliability for stiffness measurements was found for MyotonPRO (ICC≥0.91) and for SWE (ICC≥0.74). No important correlation was found between the MyotonPRO and SWE for stiffness assessment. MyotonPRO stiffness values correlated positively with age (β =0.52; p=0.03). No association was observed between SWE data and demographic variables (Table2). No differences were seen between measurements made at a blind spot (M2) or identified by SWE (M3).
Conclusions: MyotonPRO and SWE shear modulus measurements of lumbar multifidus myofascia have shown excellent intra-reader reliability in healthy subjects. However, no correlation was found between the two techniques for stiffness' measurements. Further studies are warranted to assess whether these techniques are measuring different muscle physical properties.

TABLE II. CORRELATION BETWEEN MUSCLE PROPERTIES AS ASSESSED BY MYOTONPRO AND SWE (MEAN VALUES OF BOTH SIDES) AND DEMOGRAPHIC FACTORS

Univariable analysis – Myoton Dynamic Stiffness	
	Beta coefficients
Age (years)	0.52 (0.61;9.77)
Gender (ref. female)	62.86 (-11.73;137.44)
BMI (kg/m2)	-14.23 (-31.29;2.84)
Physical activity (min/week)	0.06 (-0.13;0.25)
Univariate analysis – SWE: Shear Modulus	
	Beta coefficients
Age (years)	-0.01 (-0.25;0.23)
Gender (ref. female)	2.54 (-5.86;0.79)
BMI (kg/m2)	0.16 (-0.60;0.92)
Physical activity (min/week)	0.00008 (-0.009;0.009)

P103 – NEUROPATHIC PAIN SCREENING TOOLS IN RHEUMATOID ARTHRITIS: REAL WORLD DATA

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Introduction: The Leeds Assessment of Neuropathic Symptoms (LANSS) and the painDETECT questionnaire (PDQ) are two validated screening tools for neuropathic pain (NP). Recent evidence reported a low level of agreement between these tests in knee Osteoarthritis patients. Several studies have recently applied the PDQ in Rheumatoid Arthritis (RA), suggesting a NP component in these patients, although the application and performance comparison with LANSS is yet to be studied.
Objectives: To evaluate PDQ and LANSS performance for NP classification and investigate its optimal cutoff points in a RA cohort. Methods: Observational, cross-sectional study was designed including RA patients followed at our Rheumatology department. Patients with diagnosed neuropathy or non-RA risk factors for NP were excluded. Selected patients were evaluated in a medical visit where LANSS and PDQ were applied.

Agreement between the two tests was evaluated using kappa coefficient analysis (using PDQ and LANSS cut--offs of ≥13 and ≥12, respectively). Receiver operating characteristic (ROC) analysis was performed using each questionnaire as gold-standard and cutoff points to optimize agreement were investigated. Non-concordant patients were compared with concordant patients using parametric and non-parametric tests. Significance level was set as <0.05.

Results: 112 RA patients were included, 86 (77%) were females, with a mean (SD) age of 55.1 (10.8) years and median disease duration of 13 years (range: 2-41). 102 (91%) were treated with DMARDs and 42% with a biologic DMARD. Forty five (40%) patients had NP applying the LANSS (≥12) and 28% had NP in the PDQ (19 possible and 12 likely; no demographic or clinical significant differences were found between these two groups). 82 (73%) patients had concordant NP classification (59 negative, 23 positive) by the both tests. Concordant group had significantly superior median disease duration and inferior LANSS scores compared to non-concordant group (14 *vs* 12 years and 8 *vs* 13, respectively, p<0.05) with no other significant differences found. A moderate agreement (= 0.41) and linear correlation (r=0.58, p<0.001) were observed between the two tests. In the ROC curve analysis, PDQ (≥13) showed an area under the curve (AUC) of 0.80, 95% CI [0.72-0.88] with a sensitivity and specificity of 51% and 88%, respectively, using LANSS as gold standard. LANSS (≥12) had an AUC of 0.80, 95% CI [0.71-0.90] and a sensitivity and specificity of 74% and 73%, respectively, using PDQ as gold standard. After ROC curve analysis, optimal cutoff for PDQ was 10, showing greater sensitivity (69%) but lower specificity (79%) with a slight increase in the agreement between the tests (= 0.48). For the LANSS score, the optimal cutoffs were the previous value or ≥13 (sensitivity 68% and specificity 78%) with a modest gain in the agreement (= 0.42). Correction for both cutoffs points resulted in a more substantial increase in agreement level (= 0.51).

Conclusion: In this study, LANSS and PDQ had a moderate level of agreement, possibly because they capture different dimensions of NP. New possible cut-offs were studied to increase agreement between the tests. Further studies with other conditions and a validated gold-standard for NP are needed to confirm this hypothesis.

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CASOS CLÍNICOS (CC)

GRUPO 12

CC183 – NEM TODA A DOR É FIBROMIALGIA

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Introdução: A fratura de *stress* ocorre em resultado de um número repetitivo de movimentos numa determinada região que pode levar ao desequilíbrio da atividade dos osteoblastos e osteoclastos favorecendo a rotura óssea. Esta condição é comumente diagnosticada ao nível da tíbia, metatarsos e rótula. A Ressonância Nuclear Magnética (RNM) é o exame de imagem mais sensível e específico para o diagnóstico da fratura por *stress*, no entanto, a Cintilografia Óssea (tecnécio-99m) apresenta também uma importante sensibilidade (74--100%) para remodelação óssea.

Caso clínico: Apresenta-se o caso de uma doente de 54 anos, trabalhadora fabril, com antecedentes de Fibromialgia e Síndrome do Túnel Cárpico, que recorre à consulta de Reumatologia por quadro de dor musculoesquelética generalizada, ligeiramente mais acentuada ao nível da face anterior do 1/3 médio da perna direita, sem traumatismo associado, com agravamento ao caminhar e subir escadas para a qual se automedicou com anti-inflamatório local, sem melhoria. Ao exame objetivo apresentava palpação dolorosa da quase totalidade dos pontos fibromiálgicos e também da face anterior da tíbia direita com ligeiro aumento da temperatura local. As análises laboratoriais não demonstravam qualquer alteração relevante, nomeadamente do metabolismo fosfo-cálcio e dos parâmetros de inflamação. O radiograma da perna esquerda não revelou qualquer alteração. Perante a hipótese diagnóstica de fratura de *stress* foi pedida Cintilografia Óssea, a qual revelou padrão sugestivo compatível com essa suspeita diagnóstica. Foi então realizada Ressonância Magnética Nuclear que evidenciou pequena solução de continuidade focal da cortical, na diáfise inferior, anterior e externa da tíbia direita, igualmente compatível com fratura de stress.

Discussão e Conclusão: Trata-se de um caso que, não só pela idade como pelos antecedentes da doente (fibromialgia) poderia levar o clínico a subvalorizar as quei-

FIGURA. RMN com solução de continuidade focal da cortical na diáfise antero-externa da tíbia direita compatível com fratura de stress

xas originais. Tendo em conta as características da dor descrita, particularmente o facto de estar associada a sinais inflamatórios locais, é essencial excluir outros diagnósticos diferenciais como é o caso da fratura de *stress*. Pelo facto de a fibromialgia ser uma síndrome caracterizada por hipersensibilidade generalizada à dor que torna, muitas vezes, o diagnóstico de outras patologias músculo-esqueléticas um verdadeiro desafio, é de extrema importância que o Reumatologista mantenha especial atenção às alterações no padrão das queixas do doente.

CC60 – THE MANY FACES OF IGG4-RELATED DISEASE: A CASE REPORT WITH LARGE VESSEL INVOLVEMENT AND LITERATURE REVIEW

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Introduction: IgG4-related disease (IgG4-RD), an immune-mediated fibro-inflammatory condition, can affect various organs. Vascular involvement is a well-recognized feature and large vessel commitment, especially the aorta, can be the only manifestation of the disease. Being a newly recognized disease, its diagnosis and workup still represents a challenge in clinical practice.
Methods: Case report and comprehensive literature review.
Results: We present a rare case of IgG4-RD with aortitis with aneurysm formation, in the absence of multisystemic complaints. A 47 year-old-male with two aortic aneurysms ruptures, one at abdominal and the other at thoracic level, was conventionally treated at Vascular Surgery department. Anatomo-pathologic analysis of the surgical specimen revealed nonspecific aortitis, and the patient was referred to Rheumatology department for exclusion of large vessel vasculitis. There was no history of systemic complaints, headache, visual impairment or intermittent claudication. The physical exam didn't have any alteration. The blood pressure was measured in the four limbs with no differences between them. There was no family history of vasculitis or heritable connective tissue disorders. He was tested for syphilis, HIV, hepatitis B and C and tuberculosis which came up negative. ANAs and ANCAs were negative. The serum concentration for IgG4 was normal. Inflammatory markers were persistently normal. The 18F-FDG Positron Emission Tomography/Computed Tomography Scan revealed an "Aneurysm of the descending thoracic aorta and right common iliac artery with a slight capping in the prosthesis locations. No other functional changes suspected of vasculitis". A multidisciplinary team decision was made to re-evaluate the surgical specimen by the anatomopathologist to exclude other connective tissue diseases such as Ehlers-Danlos Syndrome and IgG4-RD. It revealed "areas of necrosis and neutrophilic overlap; lymphoid follicles with reactive germinative centers along the middle tunica; large plasma cells with immunopositivity for IgG4 at the periphery of the lymphoid follicles; adventitial lymphocytic infiltrate also with lymphoid follicles". This result confirmed the diagnosis of IgG4-RD aortitis with aneurysm formation. Since the patient was planned to be submitted to a vascular intervention in order to repair the iliac aneurism, treatment with methotrexate was started, and rituximab will be initiated after vascular surgery. We found 36 cases of IgG4-RD with vascular involvement, reported in the literature.[1] Of these, only 13 had aortitis with aneurysm formation.[1] According to the literature, the primary treatment is with corticosteroids, however rituximab (2 doses of 1 gram, administered intravenously 2 weeks apart2,3) has proved to have clinical and imagiologic improvement[1].

Discussion and Conclusion: Few cases of large vessel involvement IgG4-RD have been reported in the literature. Evidence-based recommendations regarding treatment and surveillance of large vessel involvement IgG4-RD are lacking. In this particular case, the revision of the biopsy and the histopathologic diagnosis was crucial. Although serum concentration IgG4 is usually requested as part of the diagnostic approach, it can be normal in up to one third of the patients. This single report case, with a review of previously reported cases will help in characterizing the pathogenesis, and prompt recognition and timely treatment of this rare disorder.

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CC198 – MANIFESTAÇÃO CARDÍACA DE DOENÇA DE BEHÇET

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Introdução: A Doença de Behçet é uma vasculite multissistémica cuja apresentação clínica é altamente heterogénea, levando, por vezes, ao atraso no diagnóstico. O envolvimento cardíaco, embora raro, é particularmente grave, exigindo intervenção rápida e agressiva.

Os autores apresentam o caso de um doente cujo diagnóstico, não obstante a presença de manifestações da doença há alguns anos, apenas foi estabelecido perante a existência de um trombo intracardíaco.

Caso clínico: Homem, caucasiano, 41 anos, com antecedentes de asma e trombose venosa profunda (TVP) do membro inferior direito há 12 anos. Internado por síndrome febril indeterminada e síndrome constitucional (astenia, perda ponderal cerca de 7kg num mês, anorexia), sem queixas focalizadoras ou alterações relevantes no exame objetivo. Dos exames complementares realizados, salientava-se: analiticamente, anemia normocítica e normocrómica, leucocitose neutrofílica e elevação marcada da proteína C reativa e velocidade de sedimentação, sem outras alterações relevantes; rastreio sético negativo; TC do tórax com nódulos pulmonares bilaterais, com distribuição vascular, e aumento dos gânglios linfáticos mediastínicos; PET com hipermetabolismo vascular do membro inferior esquerdo, admitindo-se processo inflamatório venoso ou arterial, e dos hilos pulmonares; ecocardiograma transtorácico (ecoTT) com massa intracardíaca do ventrículo direito, com 31mm de maior diâmetro, de contornos multilobulados e com pedículos móveis sugerindo friabilidade. Perante este achado, o doente foi transferido do Serviço de Medicina Interna para o Serviço de Cardiologia.

Tinha já cumprido diversos esquemas de antibioterapia e tuberculostáticos, sem melhoria.

O caso foi abordado por uma equipa multidisciplinar (Cardiologia, Infeciologia e Reumatologia). Após uma anamnese detalhada, apurou-se, da história pregressa: aftose oral recorrente (frequência pelo menos mensal, ocasionalmente múltipla, desde há cerca de 20 anos); um episódio de aftose genital; pustulose/ furúnculos recorrentes (inicialmente múltiplos, atualmente em menor número); episódio de retorragias de etiologia não esclarecida, contudo cursando com rebate sistémico. Negava olho vermelho doloroso, alterações cutâneas sugestivas de patergia ou queixas articulares relevantes.

A RM cardíaca confirmou massa no septo interventricular sugestiva de trombo subagudo. No *ecodoppler* do membro inferior esquerdo, apresentava sinais de TVP recente na veia poplítea e na veia femoral superficial, até ao terço médio da coxa.

Foi assumido o diagnóstico de doença de Behçet com envolvimento mucocutâneo, vascular e cardíaco. Iniciou-se prednisolona (PDN) 1 mg/kg e ciclofosfamida (CYC) 750 mg/m2. Dada a ausência de contraindicação, manteve hipocoagulação.

O doente evoluiu favoravelmente, com rápida resolução da febre e regularização das alterações analíticas. Após 3 meses, tendo cumprido 2 ciclos de CYC e em desmame de PDN (30 mg/dia), apresenta-se assintomático; o ecoTT demonstrou resolução total do trombo.

Conclusão: O envolvimento cardíaco na doença de Behçet pode apresentar-se de múltiplas formas, sendo a presença de trombos intracardíacos bastante incomum. Nestes casos, o prognóstico é particularmente sombrio, em grande parte pela presença frequente de aneurismas, disfunção valvular e trombos pulmonares.

No presente caso, a imunossupressão e a anticoagulação permitiram uma rápida regressão do quadro clínico.

Mais uma vez, sublinha-se a importância vital de

uma anamnese cuidada, da articulação de todos os dados e da intervenção multidisciplinar.

CC200 – ESCLEROMALÁCIA COMO MANIFESTAÇÃO RARA DE GRANULOMATOSE COM POLIANGEÍTE

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Introdução: A Granulomatose com Poliangeíte (GP), previamente designada de Granulomatose de Wegner, é uma vasculite necrotizante granulomatosa, idiopática e rara, que frequentemente envolve o aparelho respiratório superior e inferior e os rins. Existem formas sistémicas e localizadas. O envolvimento ocular pode ocorrer em ambas as formas. Relatamos este caso clínico com o objetivo de alertar para manifestações raras desta patologia e pretendemos salientar a importância de uma avaliação multidisciplinar precoce para o correto diagnóstico e terapêutica adequada.

Caso clínico: Homem de 56 anos, natural da Ucrânia, com antecedente pessoal de amaurose pós traumática do olho esquerdo em 2009, ex-fumador há 6 anos e seguido em consulta de Otorrinolaringologia por otites médias de repetição. Enviado à consulta de Reumatologia por poliartralgias migratórias de ritmo inflamatório das mãos, ombros, joelhos, tibiotársicas, com 3 meses de evolução, de caráter aditivo. As queixas surgiram após um episódio interpretado como infeção respiratória baixa sem isolamento de agente, que resolveu com antibioterapia empírica.

Cerca de 2 semanas após observação em consulta, o doente recorreu ao serviço de urgência de Oftalmologia por fotofobia, dor ocular e diminuição da acuidade visual (AV) do olho direito (OD), tendo sido diagnosticado com escleromalácia. Dada a gravidade da situação o doente ficou internado e realizou pulsos de metilprednisolona (MPD). Dos exames realizados, destaca-se uma ligeira elevação da velocidade de sedimentação e proteína C reativa, hipergamaglobulinemia de base larga e anti-PR3 positivo, seronegativo para fator reumatoide e anti-CCP. Na radiografia do tórax identificou-se um nódulo isolado no lobo superior do pulmão esquerdo. A TAC dos seios peri-nasais demonstrou inflamação mastoideia. Foi admitida GP como hipótese diagnóstica mais provável. O doente iniciou prednisolona (PDN) 60mg/dia e metotrexato (MTX) com aumento gradual da dose até 20mg/semana, com melhoria parcial do quadro. Cerca de 3 meses depois, houve agravamento das queixas com dor e diminuição da AV do OD pelo que foi novamente internado no serviço de oftalmologia. Forem realizados novamente pulsos de MPD e iniciou ciclofosfamida (CFF) 1500 mg, com posterior administração mensal. A TAC-tórax realizada revelou vários nódulos pulmonares compatíveis com o diagnóstico. Pela gravidade da situação clinica foi iniciada terapêutica precocemente, sem possibilidade de realizar biopsia das lesões pulmonares. Um mês depois, sob terapêutica com MTX e CFF, o doente apresenta melhoria significativa da acuidade visual, com desaparecimento dos nódulos pulmonares na reavaliação radiográfica e normalização dos títulos de anti-PR3.

Conclusão: O envolvimento orbitário da GP ocorre entre 28% a 60% dos casos, por extensão do trato respiratório superior ou por vasculite focal com envolvimento de estruturas oculares. As formas de apresentação oculares são múltiplas, mas a esclerite necrotizante e queratite ulcerativa periférica são as mais comuns. Podem estar presente na altura do diagnóstico ou ser a manifestação inaugural do quadro clínico em 8% a 16% dos doentes. A otite média de repetição é, neste caso, a manifestação inicial do quadro. Contudo, a manifestações otológicas ainda que presentes em 20% a 61% dos casos, são raramente a manifestação inaugural. Especialmente neste caso, tratando-se de doente com olho único, a avaliação multidisciplinar foi fundamental para o correto diagnóstico e tratamento precoce do doente.

CC66 – AS POTENCIAIS FACES DAS MICOBACTÉRIAS

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Introdução: A epidemiologia da infeção por *Mycobacterium tuberculosis* está bem descrita, mas pouco se sabe sobre infeções a micobactérias não tuberculosas (MNT). Reportam-se os casos de 3 doentes com infeções a MNT.

Caso Clínico 1: Mulher de 64 anos, com artrite reumatóide (AR) há 14 anos. Por tosse não produtiva com 5 meses de evolução, efetuou TC torácicas seriadas que revelaram nódulos pulmonares basais, do lobo médio e língula, o maior com 6 mm, estáveis, à data não sugestivos de infeção ou neoplasia. Sem indicação para profilaxia de tuberculose latente (PTL), cumpriu adalimumab (ADA) durante 5 meses, até internamento por febre, sudorese noturna e tosse produtiva de expetoração hemoptóica. Do estudo efetuado destaca-se: padrão reticulo-micronodular, gânglios milimétricos mediastínicos e hilares em TC torácica e biópsia pulmonar com processo inflamatório crónico granulomatoso, necrose focal e células gigantes nucleadas tipo Langhans, sugerindo tuberculose (TB). Cumpriu isoniazida (IZN), rifampicina (RFP), pirazinamida e etambutol (ETB) até isolamento de Mycobacterium chelonae em cultura de secreções brônquicas. Ajustou-se antibioterapia para levofloxacina, claritromicina (CLT) e sulfametoxazol/trimetoprim (8 dias) com melhoria. Retomou ADA (suspenso por 3 meses) sem recorrência.

Caso clínico 2: Mulher de 38 anos, com AR há 12 anos, em quem se documentaram raros gânglios mediastínicos e axilares, o maior com 22 mm, em TC torácica pré-biológico, sem indicação para PTL pelo CDP. Cumpriu etanercept (ETN) durante 6 meses, até agravamento dos gânglios, em número e volume. Efetuada punção ganglionar, com resultados anátomo-patológico e bacteriológicos negativos. Iniciou IZN e repetiu TC torácica, sobreponível, retomando ETN (suspenso por 6 meses). Após 20 dias, foi medicada com cefixima por infeção respiratória. Evoluiu com manutenção de expetoração, pelo que se substituiu o antibiótico por ciprofloxacina que cumpriu durante 40 dias, com melhoria. A cultura de expetoração permitiu o isolamento de M. gordonae, sem características patogénicas. Encontrando-se assintomática, optou-se por reiniciar ETN. Completou PTL (9 meses) e repetiu TC, com estabilidade das adenopatias.

Caso clínico 3: Homem de 38 anos, com diagnóstico presuntivo de espondilartrite indiferenciada, que desenvolveu tenossinovite dos extensores e flexores dos dedos da mão direita, comprovada por ecografia, após picada de inseto em país tropical, sem resposta à antibioterapia (1 mês). Durante desmame de corticoterapia (CTC) por agudização asmática, verificou-se agravamento do quadro com aumento de volume do 2º, 4º e 5º dedos da mão direita. Admitiu-se provável dactilite, que melhorou com reintrodução de CTC. Por nova recorrência após a sua suspensão, introduziu-se sulfassalazina e metotrexato e realizou infiltração, com melhoria transitória. Iniciou ETN após PTL, com melhoria inicial e subsequente recorrência, realizando switch para ADA, sem melhoria. Isolada MNT na biópsia da sinovial (provável *M. marinum),* medicou-se com RFP, ETB e CLT. Após 1 ano foram excisados granulomas, sem isolamento de MNT.

Discussão: As MNT têm sido os agentes bacterianos mais comummente responsáveis por infeções oportunistas em doentes sob biológicos. Várias recomendações foram emitidas para prevenção de reativação de TB latente. Contrariamente à TB, pensa-se que as doenças causadas por MNT nestes doentes surgem principalmente como infeções de novo. Nos 2 primeiros casos relatados, as MNT foram causas de infeção ou de colonização. O 3º relata a mimetização de manifestação da doença reumática de base.

CC97 – ARTRITE SÉPTICA: RELATO DE UM CASO CLÍNICO RARO

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Introdução: A artrite séptica é considerada uma urgência médica e o atraso no seu tratamento conduz a dano articular irreversível, sendo portanto essencial o diagnóstico precoce.

A artrite séptica por fungos é uma condição clínica rara e ocorre maioritariamente em doentes imunodeprimidos. Os microrganismos mais frequentemente envolvidos são espécies de Aspergillus. A artrite fúngica ocorre, principalmente, por disseminação hematogénica, por contiguidade de infeção ou por inoculação direta devido a trauma ou um evento iatrogénico.

Objetivo: Relato de um caso clínico de monoartrite infeciosa do joelho por Aspergillus em doente não imunodeprimido.

Caso clínico: Doente do sexo masculino, de 39 anos de idade, agricultor, com história de traumatismo com objeto contundente no joelho direito 2 meses antes de ser admitido no hospital por febre, dor e tumefação do joelho direito. Na avaliação constatadas anemia, elevação dos parâmetros inflamatórios, cultura do líquido sinovial e hemoculturas positivas para *Staphylococcus aureus* e serologias víricas negativas. Assim, foi estabelecido o diagnóstico de artrite séptica bacteriana por *Sta-*

phylococcus aureus e, numa 1ª fase, além da medicação com vancomicina, foi apenas submetido a lavagem articular. No entanto, por não melhorar como esperado, verificando-se, pelo contrário, aumento progressivo da tumefacção articular foi submetido a artrotomia e a colocação de sistema de lavagem e drenagem contínua, mantendo a antibioterapia com vancomicina. O resultado também não foi o esperado, embora, nesta altura, a cultura de líquido sinovial se revelasse já amicrobiana. Por manter o quadro de artrite do joelho apesar das medidas instituídas e da antibioterapia já prolongada, foi internado no serviço de Reumatologia para exclusão de outras causas. Nesta altura, a radiografia simples já mostrava evolução destrutiva com diminuição franca da entrelinha articular e erosões na face lateral da tíbia e côndilo femoral. Voltou a ser realizada artrocentese para estudo do líquido sinovial, incluindo agora o exame bacteriológico, pesquisa de micobactérias e estudo micológico que também foram negativos. No entanto, no estudo anátomo-patológico da membrana sinovial, após biópsia por agulha, foram identificadas estruturas morfologicamente suspeitas de esporos fúngicos. Estes achados anátomo-patológicos e a positividade para o antigénio Galactomanano apoiaram o diagnóstico de artrite fúngica, neste caso aspergilose monofocal, e sobre infeção bacteriana. Após seis meses de tratamento com voriconazol registou-se melhoria clínica significativa com normalização dos valores hematológicos e dos parâmetros inflamatórios.

Discussão/Conclusão: Com o presente caso pretendeu-se salientar a dificuldade de diagnóstico de uma artrite fúngica e a importância da biópsia sinovial no seu diagnóstico.

A artrite fúngica é uma situação clínica rara. Na literatura estão descritos alguns casos de artrite por *Aspergillus*, mas principalmente em indivíduos imunodeprimidos. Neste caso, o doente era imunocompetente mas tinha história prévia de trauma e infeção fúngica muito provável por inoculação direta, e posteriormente sobre infeção bacteriana.

A resposta clínica sustentada à terapêutica antifúngica reforçou o diagnóstico.

CC121 – XEROSTOMIA DE ETIOLOGIA ATÍPICA

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A amiloidose primária (AL) é caracterizada pelo depósito de substância amiloide em diversos tecidos e representa uma causa rara de xerostomia, especialmente quando não é acompanhada de qualquer outro sinal ou sintoma de doença sistémica.

O presente caso clínico descreve uma doente de 69 anos, caucasiana, com antecedentes de diabetes mellitus tipo 2, hipertensão arterial essencial, dislipidemia e obesidade, para os quais se encontrava medicada cronicamente. Foi observada em consulta externa de reumatologia após referenciação pelo seu médico de família por queixas de xerostomia com vários anos de evolução, com necessidade de lubrificação da mucosa oral frequente e dificuldade na mastigação, assim como parestesias do primeiro e segundo dedos das mãos, negando quaisquer outras queixas de órgão ou sistema. Ao exame objectivo apresentava mucosa oral seca com clara diminuição do lago salivar e teste de Tinnel e Phalen positivos. A avaliação laboratorial não apresentava qualquer alteração, nomeadamente do hemograma, *VS* e PCR, electroforese de proteínas séricas, provas de função tiroideia, hepática ou renal. O estudo imunológico (ANA, ENA, ds-DNA e complemento C3 e C4) foi todo negativo, com exame de sedimento urinário normal. Dada a suspeita de síndrome de Sjögren realizou-se biópsia das glândulas salivares minor que revelou lesões de sialadenite crónica, sem critérios para doença de Sjögren, com presença de depósitos de amilóide do tipo AL. Foi assumido diagnóstico de Amiloidose primária localizada, com envolvimento das glândulas salivares e síndrome do canal cárpico bilateral provavelmente neste contexto.

Apesar da escassez de casos descritos na literatura internacional, a abordagem do doente com xerostomia deve considerar a amiloidose primária como diagnóstico diferencial, mesmo na ausência de sinais ou sintomas sistémicos. A biópsia das glândulas salivares minor é deste modo um exame complementar de diagnóstico de extrema relevância

GRUPO 13

CC129 – SARCOIDOSE: DOIS CASOS CLÍNICOS COM FORMAS DE APRESENTAÇÃO A MIMETIZAR ESPONDILARTRITE

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Introdução: A sarcoidose é uma doença granulomatosa sistémica que pode envolver vários órgãos e sistemas e assumir as mais distintas formas de apresentação, mimetizando inclusivé outras patologias inflamatórias musculoesqueléticas. Os autores relatam dois casos de sarcoidose que tiveram apresentações clínicas iniciais sugestivas de espondilartrite. Caso Clínico 1: Homem de 33 anos internado no serviço de Reumatologia por quadro com um mês de evolução de lombalgia e artralgias inflamatórias envolvendo os joelhos e tornozelos bilateralmente, talalgias inferiores bilaterais e lesões cutâneas eritematosas e dolorosas nas surperfícies extensoras dos cotovelos e joelhos, sem outra sintomatologia. Objetivamente apresentava artrite das tibiotársicas, fasceíte plantar à esquerda, entesite de Aquiles à direita e manobras das sacroilíacas negativas. Analiticamente com PCR 69,7 mg/L;*VS* 66 mm/1ªh, serologias negativas para VIH,VHB e C; doseamento de ECA normal (49 U/L) e FR, anti-CCP e HLA-B27 negativos. As radiografias osteoarticulares não apresentavam alterações relevantes, nomeadamente sacroileíte; a radiografia de tórax demonstrou reforço hilar acentuado bilateralmente. Fez TAC de tórax que revelou adenomegalias hilares e mediastínicas bilaterais compatíveis com sarcoidose grau I. Realizou broncofibroscopia cujo lavado broncoalveolar demonstrou aumento da relação CD4+/CD8+ e a histologia da biópsia transbrônquica documentou discreto infiltrado inflamatório mononucleado. Realizada ainda biópsia de lesões cutâneas, cuja histologia revelou granulomas epitelióides sem necrose, células gigantes multinucleadas e linfócitos adjacentes. Por apresentar alterações electrocardiográfias, fez ainda RMN cardíaca que demonstrou pequenos focos de realce tardio com padrão não isquémico sugestivos de fibrose, compatíveis com atingimento cardíaco por sarcoidose. Caso Clínico 2: Mulher de 34 anos, alemã, com diagnóstico de artrite psoriática efectuado na Alemanha aos 20 anos de idade e medicada com Etanercept desde há 14 anos, com quadro inicial de oligoartrite dos joelhos e tibiotársicas, lombalgia inflamatória e lesões psoriasiformes retroauriculares. Suspendeu Etanercept por vontade de engravidar e 3 meses depois foi internada no serviço de Reumatologia por febre de predomínio vespertino(38-39,7ºC), sudorese nocturna, tosse seca e dispneia para médios esforços com um mês de evolução. Analiticamente, com anemia normocítica normocrómica (Hb 10,9 g/dl), linfopenia (1120/mm3), *VS* 83 mm/1ªh, PCR 68,0 mg/L;colestase G-GT 175 U/L;FA 248 U/L;ECA elevada (261 U/L),hemoculturas e serologias negativas para VIH, VHB e C. A TAC torácica revelou várias formações ganglionares mediastínicas milimétricas em localização paratraqueal direita e múltiplos focos de micronódulos com distribuição peri-broncovascular, sugestivos de sarcoidose estadio III. Fez broncofibroscopia com biópsia transbrônquica a demonstrar granulomas epitelióides a nível histológico e exames directo e cultural para *Mycobacterium tuberculosis* negativos. A ecografia abdominal demonstrou hepatomegalia heterogénea e a RMN abdominal revelou granulomas coalescentes periportais. Um ano antes foi colecistectomizada por colecistite aguda com histologia a mostrar gânglio linfático com reação granulomatosa e células do tipo Langhans. Realizado o diagnóstico de sarcoidose com envolvimento articular, pulmonar e hepático.
Conclusão: A sarcoidose é uma patologia heterogénea, pelo que para o seu diagnóstico precoce é fundamental uma abordagem global do doente com reconhecimento das mais diversas formas de apresentação.

CC132 – ARTRITE SÉPTICA POR *STREPTOCOCCUS AGALACTIAE* EM DOENTE COM LES

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Introdução: O Lúpus Eritematoso Sistémico (LES) determina imunossupressão crónica com aumento de risco infeccioso inerente, nomeadamente por microorganismos atípicos. Antes de 1980, a artrite séptica por *Streptococcus Agalactiae* era rara em mulheres não grávidas, mas tem havido aumento da incidência deste agente em doentes imunossuprimidos. Os autores relatam um caso de agudização de LES complicada por vasculite cutânea com úlceras infetadas e artrite séptica por *S.Agalactiae*.
Caso Clínico: Mulher de 31 anos, com diagnóstico de LES há 5 anos com envolvimento articular e hematológico, medicada com hidroxicloroquina 400 mg, deflazacort 9 mg e celecoxib 200 mg. Internada no Serviço de Dermatologia para estudo de lesões cutâneas eritemato-violáceas, pruriginosas, algumas das quais

ulceradas, localizadas nas regiões dorsal, nadegueira e ombro esquerdo, com 1 mês de evolução. Associadamente, referia artralgias inflamatórias e tumefacção do punho e joelho esquerdos. Negava febre, perda ponderal, adenomegalias, sintomas gastrointestinais ou genitourinários ou contexto epidemiológico de infeção. Ao exame objetivo, apresentava-se apirética, com oligoartrite (joelho e punho esquerdos) e as lesões cutâneas acima descritas. Analiticamente, com anemia normocítica normocrómica (Hb 9,7 g/dL), LDH, haptoglobinas e bilirrubinas normais, com raros esquizócitos, trombocitopenia (55 000), linfopenia (170), aumento dos parâmetros inflamatórios (*VS* 77 mm/h;PCR 69,2 mg/L), consumo de complemento, ANA > 1/ 1000 padrão homogéneo, anti-dsDNA > 800, anti-nucleossomas e anti-substância P-ribossómica positivos. Por suspeita de agudização de LES iniciou prednisolona 40 mg/dia e foi transferida para o Serviço de Reumatologia. No 2º dia de internamento apresentou febre (pico máx 39,7ºC) e aumento do calor e rubor do joelho esquerdo, tendo realizado artrocentese com saída de líquido opalescente e contagem total de 60 560 células, das quais 96% de neutrófilos e isolamento cultural de *S.Agalactiae* em três amostras consecutivas do liquido articular. Fez artrotomia e lavagem articular, também com o referido isolamento cultural no líquido colhido intraoperatoriamente. Para esclarecimento das lesões cutâneas, foi realizada biópsia, cuja histologia documentou num dos fragmentos sinais de vasculite neutrofílica em vasos de pequeno calibre na derme e noutro fragmento lesões de necrose associadas a neutrófilos e vasculite, sugerindo etiologia infecciosa, com isolamento bacteriológico do mesmo microorganismo no estudo cultural do exsudado da base da úlcera. Iniciou-se antibioterapia empírica com ceftriaxone e vancomicina e reduziu-se progressivamente a dose de corticoterapia. De acordo com o perfil de sensibilidade do agente isolado, após 7 dias, descalou-se a antibioterapia para penicilina G que cumpriu durante 28 dias, substituída posteriormente por ciprofloxacina oral por boa resposta clínica e analítica, tendo cumprido um total de 6 semanas de antibioterapia. Apresentou ainda melhoria das lesões vasculíticas com a corticoterapia instituída. Deste modo, foi efetuado o diagnóstico de flare de LES, com vasculite cutânea associada, complicado com artrite séptica (por agente isolado em úlceras vasculíticas) em relação provável com a imunossupressão secundária a corticoterapia e doença de base.

Conclusão: O nível de suspeita clínica no que concerne ao diagnóstico diferencial entre agudização da doença ou processo infecioso subjacente deve ser elevado, de modo a permitir uma abordagem precoce e melhoria do prognóstico funcional e vital.

CC145 – HYPERPHOSPHATEMIC FAMILIAL TUMORAL CALCINOSIS – A CASE REPORT

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Introduction: Hyperphosphatemic familial tumoral calcinosis (HFTC) is an autosomal recessive metabolic disorder where a defect of fibroblast growth factor 23 synthesis/action results in increased phosphorus renal reabsorption. The authors report a case of this challenging disease, characterized by accumulation of calcium phosphate deposits in soft tissues, especially periarticular spaces.

Case description: A 36-year-old bipolar woman presented at a rheumatology consultation with right shoulder and bilateral hip pain for more than five years that worsened progressively, with the appearance of swelling. At observation, there were palpable, adherent, hard and painful masses on the right shoulder and lateral aspect of the hips, compromising active/passive movements. A similar, smaller, mass was present in the medial region of the dorsum of the right foot. Radiographies (images to the left) revealed bulky peri-articular calcifications of the right shoulder and hip and a lesion in the right foot, all suggestive of tumoral calcinosis. Serum phosphorus was raised (6.8mg/dl), with normal serum calcium (9.6 mg/dl), 25-hydroxycholecalciferol of 10 mmol/L, parathyroid hormone of 72.6pg/ml, and both ESR and CPR elevated (120mm/h and 15.7mg/dl). Phosphorus and calcium urinary excretion were decreased (0.4g/day and 5mg/day, respectively), with increased calculated phosphate tubular resorption (97.9%). Genetic study confirmed recessive mutation of the GALTN3 gene (enzyme responsible of FGF23 o-glycosilation) in homozygoty, allowing the definitive diagnosis of HFTC.

Targeted treatment with acetazolamide (to increase renal phosphorus excretion), sodium aluminium dihydroxide carbonate (phosphorus binder) and dietary phosphate restriction was started. After a 6 months' interval, although serum phosphate remained elevated,

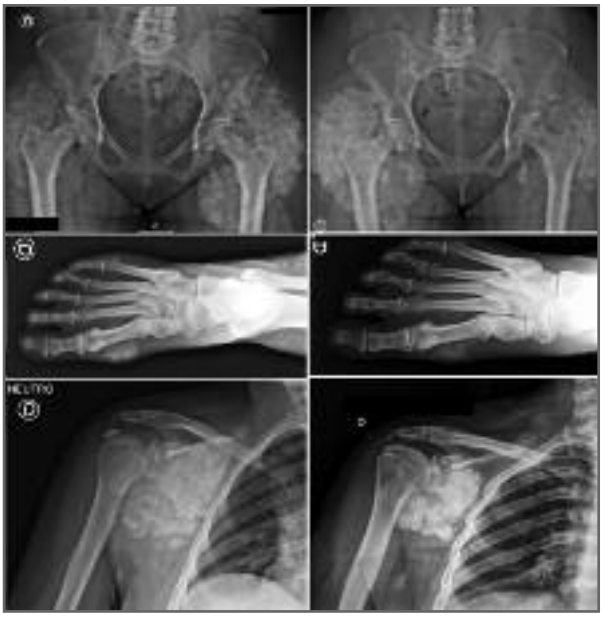

FIGURE. Radiographic images of pelvis, right shoulder and right foot before (left) and 6 months after treatment (right)

radiographic revaluation (images to the right) showed reduction of the right shoulder, left hip and right foot calcifications, with marked improvement of patient pain and mobilization.

Conclusion: HFTC, besides being an extremely rare condition, has also marked effects in patient's daily life. Current available treatment options are scarce and lesions usually relapse after surgical removal. The case presented showed radiographic response to medical and dietary treatment.

CC162 – UMA DOENÇA COM "X" MANIFESTAÇÕES: HISTIOCITOSE DE CÉLULAS DE LANGERHANS (HCL)

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Introdução: A Histiocitose de Células de Langerhans (HCL - antigamente conhecida por Histiocitose X) diz respeito a um conjunto de perturbações raras (com uma incidência de cerca de 2-5 por milhão) de etiologia desconhecida, em que existe uma proliferação de macrófagos anormais (histiócitos) e eosinófilos. Esta condição é extremamente heterogénea podendo afetar doentes em qualquer faixa etária e atingir qualquer órgão, sendo no entanto mais frequente em crianças e com atingimento particular do osso e do pulmão. O comprometimento do esqueleto pode manifestar-se sob a forma de áreas solitárias ou múltiplas com padrão de destruição osteolítica ou de fratura patológica, podendo também exibir atividade osteoblástica. O diagnóstico é confirmado por imunohistoquímica e o tratamento depende da forma de apresentação e evolução da doença baseando-se, sobretudo, em terapêutica imunomoduladora e anti-neoplásica.

Caso clínico: Descreve-se o caso de uma doente do sexo feminino de 30 anos, sem antecedentes pessoais de relevo, que recorre à consulta de Reumatologia por queixas persistentes de dor, de ritmo mecânico, ao nível da grelha costal direita, de agravamento progressivo com cerca de 4 anos de evolução. Referia ainda, num passado mais recente, dorsalgia de ritmo incaracterístico. Era portadora de exames complementares de imagem, nomeadamente de TC Torácica que evidenciava lesões líticas da 10ª costela direita, corpo de D5 e de L1, e Cintigrafia Óssea que documentava hiperactividade osteoblástica no arco posterior da 10ª costela direita, ilíaco direito, sacroilíaca esquerda e tíbia homolateral. No Exame Objetivo não apresentava exacerbação significativa da dor à palpação dos arcos costais e apófises espinhosas, não eram palpáveis quaisquer adenomegálias e o exame abdominal era, também ele, inocente. Relativamente ao estudo analítico dirigido (especificamente hemograma, estudo da coagulação, provas de síntese hepática e metabolismo fosfo-cálcio), não revelou, igualmente, alterações relevantes. Após discussão dos achados clínicos e imagiológicos em reunião multidisciplinar de Reumatologia/Imagiologia, foi colocada a hipótese diagnóstica de HCL tendo sido sugerido estudo da coluna dorsal e lombar por RMN. Esta evidenciou múltiplas alterações ósseas com hipersinal em T2 e hiposinal em T1 em todo o esqueleto axial (C1, D4, D6, D9, L3, L5 e S1). Foi ainda requisitada TC tóraco-abdomino-pélvica, que comprovou envolvimento ósseo multifocal (lesões do tipo lítico) e duas lesões extra-ósseas (designadamente na transição cervico-torácica esquerda e baço). Para esclarecimento dos achados realizou biópsia do ilíaco direito.

Conclusão: Trata-se de um caso incomum, não só pela doença em si mas também pelo próprio quadro clíni-

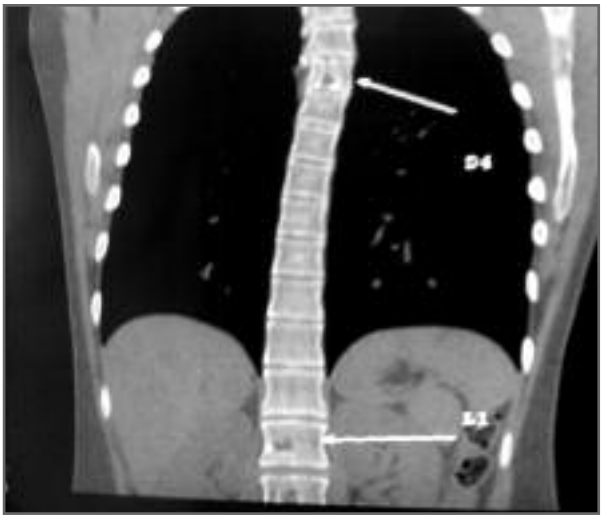

FIGURA. Tomografia Computorizada do tórax evidenciando lesões líticas do corpo de D4 e de L1

co subjacente (tendo em conta que as lesões axiais são, muitas vezes, assintomáticas), que permitiu suspeitar e investigar de forma mais orientada a sua origem. Nesse sentido, e tendo em conta o envolvimento ósseo frequente, o reumatologista deve estar atento às várias manifestações possíveis da patologia em questão, facto que pode ser decisivo na conduta terapêutica e no prognóstico dos doentes dado o potencial de gravidade que pode estar inerente. A colaboração entre o serviço de Reumatologia e de Imagiologia constitui, neste caso, um bom exemplo da interdisciplinaridade que deve existir no seio do ambiente hospitalar.

CC164 – "SÓ" VASCULITE, OU ALGO MAIS?

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Introdução: Os processos de vasculite são caracterizados por inflamação e necrose da parede dos vasos sanguíneos. Apesar de pouco frequentes, são uma importante causa de disfunção multiorgânica e mortalidade precoce. Dependendo do calibre dos vasos atingidos, pode originar manifestações clínicas diversas, o que dificulta, por vezes, o seu reconhecimento. Entre os diagnósticos diferenciais, é de especial importância a exclusão de infeções e neoplasias uma vez que a terapêutica imunossupressora pode agravar ou dificultar o diagnóstico destas condições.

Caso Clínico: Descreve-se o caso de uma doente do sexo feminino, de 39 anos, seguida em consulta de Reumatologia por um Síndrome de Sjögren primário (serologias positivas para Ac. Anti-Ro/SSA e anti-La/SSB, xerostomia, xeroftalmia e confirmação oftalmológica de queratoconjuntivite sicca) em sobreposição com Esclerose Sistémica (lesões hemorrágicas punctiformes digitais, padrão de esclerodermia na capilaroscopia, fenómeno de Raynaud e anticorpos anti-Scl-70 positivos) medicada com hidroxicloroquina (400mg/dia). Inicia quadro com poucos dias de evolução de lesões eritematosas punctiformes, purpúricas, indolores e não pruriginosas, ao nível de ambas as pernas com extensão à raiz das coxas bilateralmente que, ao exame objetivo, não desapareciam com a digitopressão (não eram palpáveis quaisquer adenomegálias). Analiticamente não apresentava alterações de novo (particularmente parâmetros inflamatórios ou estudo da coagulação). Após suspeita de processo vasculítico, foi realizada biópsia cutânea que confirmou vasculite leucocitoclástica que se assumiu no contexto da patologia de base, pelo que iniciou terapêutica com metotrexato (15mg/semana). Contudo, e após cerca de um mês de tratamento, registou-se aparecimento de novas lesões na face antero-externa da perna esquerda, de características semelhantes às descritas, medindo até 1 cm de diâmetro. Perante o agravamento do quadro de vasculite procedeu-se à alteração da terapêutica imunossupressora, inicialmente para rituximab e posteriormente, dada a ausência de resposta, para ciclosporina seguida de micofenolato de mofetilo com melhoria clínica das lesões após o último *switch*. Em consulta de reavaliação verificou-se descamação de algumas das referidas lesões (nomeadamente a nível da virilha e perna esquerda) o que levou à suspeição de intercorrência infeciosa de provável etiologia fúngica. Por conseguinte, foi instituída terapêutica antifúngica com Terbinafina tendo-se verificado regressão das lesões. Assumiu-se assim o diagnóstico de infeção fúngica (provavelmente tinea cruris) sobreposta às lesões de vasculite originais.

Conclusão: Chama-se a atenção para o facto de, mesmo após a confirmação do diagnóstico de vasculite, e apesar da dificuldade no seu controlo, existiu sobreposição de outra condição clínica com características mimetizadoras (na fase inicial). Neste caso, a resposta flutuante à terapêutica imunossupressora e a alteração das características das lesões permitiram suspeitar de

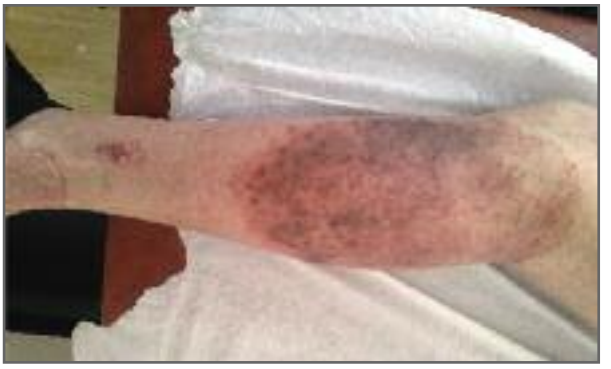

FIGURA. Lesões (prováveis) de *tinea cruris* sobrepostas às lesões de vasculite originais

um diagnóstico alternativo, possibilitando a instituição atempada do tratamento mais adequado.

CC175 – COCAINE ASSOCIATED VASCULITIS – A GROWING ISSUE

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Introduction: Cocaine toxicity concerns several health professionals, including rheumatologists. Cocaine has the propensity to trigger diverse immunological reactions, including vasculitis involving multiple organs.
Clinical case: 49 years old male with past history of gout arthritis and ruptured pancreato-duodenal artery aneurism. He presented with non-thrombocytopenic palpable, necrotic and confluent purpura involving lower limbs but with fast progression to abdomen and upper limbs, which had started 3 days earlier. He had a mild rhinopharyngitis two weeks earlier, but denied arthralgias, abdominal pain, gastrointestinal bleeding and hematuria. Medication included long-term silymarin and colchicine on demand and no over-the-counter drugs. He was a heavy drinker and cocaine consumer for 30 years (500 milligrams/day). He admitted having changed his cocaine provider one week prior to the episode. Physical examination was otherwise normal. Blood tests revealed normal blood count, clotting tests and sedimentation rate, but C-reactive protein was mildly elevated (2.6 mg/dL). Antinuclear antibodies and extractable nuclear antibodies panel (Smith, ribonucleoprotein, Ro, La, Scl-70, Jo-1), double-stranded DNA, antineutrophil cytoplasmic antibodies, antiphospholipid antibodies and cryoglobulins were not detected and complement normal. Serology for HIV, HCV and HBV were negative. There was no leucocytes, erythrocytes or proteinuria in the urine analysis. Chest X-ray did not show any relevant feature. Skin histopathology was compatible with a leucocytoclastic vasculitis with deposits of IgG and IgA in the dermo-epidermal junction on immunofluorescence staining. Sinus CT revealed diffuse hyperplasia of the right inferior turbinate but no other alterations. Due to history of rhinopharyngitis and IgA deposits on skin biopsy, we couldn't exclude an incomplete presentation of adult Henoch-Schönlein Purpura (HSP), but the upper limbs involvement and the chronological relation with cocaine provider change, suggested a cocaine associated vasculitis (CAV). A sample of the cocaine was analysed at the police laboratory for detection of levamisole, but it was negative. The patient was successfully treated with prednisolone, tapered over two months. After one-year follow-up, he's still consuming cocaine but has not gone back to the previous provider.
Discussion: Several forms of vasculitis have been associated with cocaine including leucocytoclastic vasculitis, granulomatosis with polyangiitis, cerebral angitis, scrotal vasculitis, urticarial vasculitis, IgA nephropathy and vasculitis associated with spontaneous renal artery bleeding. Cocaine itself can be associated with vasculitis, but this is especially true when some adulterants are present, mainly levamisole, a veterinary anti-helminthic used in the past for treatment of immune-mediated disorders. It is also known that CAV may appear several years after exposure, so despite the negativity for levamisole in our patient's sample and the

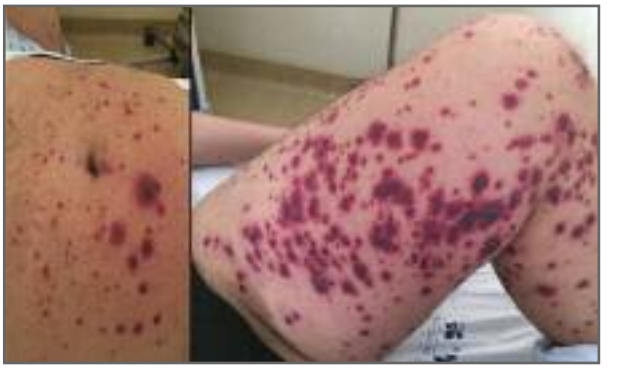

FIGURE. Púrpura necrotisante dos membros inferiores, abdómen e membros superiores

coincidence of change in the provider, levamisole could have been present in previous samples. Another important message is that in adults the presence of IgA in dermal vessels is not limited to HSP and is a relatively nonspecific finding, with very different sensitivity and specificity compared with children. Although we can't ascertain a cause for this patient's vasculitis, we wish to alert the rheumatological community for the expected growing number of CAV, especially since there is a trend for increasing percentages of cocaine adulteration with levamisole.

CC74 – COMPLICAÇÕES POTENCIALMENTE FATAIS NA DOENÇA STILL DO ADULTO

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Introdução: A doença de Still do adulto (AOSD) é uma doença sistémica imunomediada cuja complicação mais frequente é a síndrome de activação macrofágica (SAM). Contudo, outras complicações menos frequentes podem ser potencialmente fatais.

Os autores descrevem o caso de uma doente com AOSD complicada por SAM e hipertensão pulmonar (HTP).

Caso clínico: Doente do sexo feminino, 26 anos, sem antecedentes patológicos relevantes à data do início da doença.

Aos 21 anos (durante a sua terceira gravidez), foi estabelecido o diagnóstico de AOSD, na presença de febre elevada, mialgias, artrite, rash cutâneo disperso e períodos de odinofagia, acompanhando-se de leucocitose neutrofílica e hiperferritinémia.

Inicialmente tratada com anti-inflamatórios não esteróides e corticoterapia em dose máxima de 20 mg/dia. Por actividade persistente, depois do parto iniciou metotrexato em dose crescente até 25mg/semana, sem controlo das queixas e sem possibilidade de redução da corticoterapia. Foi acrescentada colchicina, que também não trouxe melhoria. Iniciou anacinra 100mg SC id, por doença refratária e corticodependente. Apesar de ter apresentado boa resposta clínica e analítica, este fármaco teve de ser suspenso devido a exuberantes reações no local das administrações. Por atividade persistente da doença, iniciou tocilizumab ev 8 mg/kg; fez quatro infusões mensais, sem qualquer melhoria, pelo que foi suspenso. Por agravamento clínico evidente, com ressurgimento do rash e artralgias, síndrome constitucional, esplenomegália e adenomegálias, febre e agravamento da anemia, da hiperferritinémia e elevação da LDH e dos parâmetros inflamatórios, retomou anacinra 100mg sob anti-histamínicos e com alternância dos locais de administração. Cumpriu ainda um ciclo de imunoglobulina humana endovenosa na dose de 2g/kg e três pulsos de metilprednisolona 500mg, com resposta parcial. Manteve-se medicada com prednisolona 20 mg id e a dose de anacinra foi aumentada para 100mg 2id. Na ausência de resposta clínica satisfatória, foi realizado medulograma, que confirmou a presença de SAM. Discutido o caso em painéis internacionais, iniciou canacinumab 150 mg em associação a ciclosporina (6 mg/kg) e reforço da dose de anacinra até 600mg por dia. Após esta conduta, verificou-se melhoria franca do estado geral, mantendo controlo satisfatório da doença durante cerca de 4 meses. Teve então novo agravamento clínico e analítico, acrescido de dispneia para esforços e dor retroesternal. Realizou ecocardiograma transtorácico que mostrou insuficiência moderada da válvula tricúspide, com PSAP de 80 mmHg; morfologia do fluxo pulmonar tipo III, sugestivo de HTP severa e derrame pericárdico de grau ligeiro global com espessamento pericárdico. Foi transferida para o Serviço de Cardiologia e, após realização de cateterismo confirmando HTP e exclusão de outras causas, iniciou macitentano e tadalafil, paralelamente ao reforço da corticoterapia (PDN 1mg/kg) com suspensão do canacinumab mantendo a restante medicação.

Desde então, com melhoria global marcada, tendo sido possível reduzir a dose de anacinra até 200mg id e de PDN até 20 mg id, com estabilidade clínica e analítica.

Conclusão: Até à data, apenas 11 casos de AOSD complicada por HTP estão descritos na literatura e, destes, apenas um em que coexistem os diagnósticos de SAM e HTP. Na maioria dos casos, a HTP foi abordada com sucesso unicamente com imunossupressão, o que torna o presente caso singular.

GRUPO 14

CC116 – FIBRODISPLASIA ÓSSEA E SÍNDROME DE MCCUNE-ALBRIGHT: DESCRIÇÃO DE UM CASO CLÍNICO

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Introdução: A fibrodisplasia óssea (FDO) é uma doen-

ça óssea rara, genética, não-hereditária, que pode manifestar-se quer na criança quer no adulto, por dor óssea, fracturas, deformação do esqueleto ou alterações neurológicas. O quadro clínico é variado, mas a doença é frequentemente assintomática. Existem 3 formas de FDO: monostótica, poliostótica simples ou associada a alterações endócrinas. Na síndrome de McCune-Albright (SMA), a FDO poliostótica surge associada com manchas cutâneas café com leite e/ou alterações endocrinológicas múltiplas hiperfuncionantes.

Caso Clínico: Homem de 30 anos de idade, raça negra, natural de Luanda, assintomático até aos 14 anos de idade, quando refere o aparecimento progressivo de deformação das ancas e da face. Aos 31 anos de idade, 17 anos após o início da deformação óssea, foi internado para investigação clínica. Não apresentava antecedentes pessoais relevantes e em relação à história familiar, não eram conhecidas doenças ósseas. No exame físico destacava-se dimorfismo da face e da anca com implicações motoras. Não se observavam alterações cutâneas, designadamente manchas hiperpigmentadas do tipo «café com leite».

O estudo laboratorial revelou elevação da fosfatase alcalina total 417 UI/L (valores normais: 30-120). Os valores de calcemia e fosforemia eram normais (respetivamente, 9,0 mg/dl [8,8-10,6] e 2,8 mg/dl [2,5-4,5]), com calciúria e fosfatúria normais (100 mg/24 horas [<300] e 441 g/24 horas [400-1300]), respetivamente), paratormorna elevada (92 pg/mL [9-72]) e Vitamina D com défice ligeiro (25 ng/mL [>29)]. A avaliação laboratorial endocrinológica, revelou hormona de crescimento elevada (12 μg/L[<1]), IGF1 elevada (428 ng/ml [115 - 307]), ACTH elevada (74 pg/ml [115 - 307]) e testosterona total diminuída (1.2 ng/ml [2.7 - 11.0]) A restante avaliação laboratorial incluindo cortisol sérico e urinário, hormonas sexuais (FSH e LH), TSH, T3 e T4 livres era normal.

No estudo radiográfico do esqueleto salientavam-se imagens de deformidade de fémur em "cajado de pastor" bilateralmente, aspeto em vidro despolido, alterações que afetavam também o maciço facial e a base do crânio (com deformidade óssea acentuada) também visíveis na TAC. Iniciou terapêutica com bisfosfonato, cálcio e vitamina D. Colocou-se o diagnóstico de fibrodisplasia óssea poliostótica e, admite-se segundo alguns autores, síndrome de McCune-Allbrigth (acromegália e fibrodisplasia poliostótica).

Conclusão: A FDO é geralmente uma doença com prognóstico favorável, no entanto, pode apresentar-se como formas graves. Estas estão habitualmente associadas ao envolvimento poliostótico. O seu diagnóstico obriga à avaliação da sua actividade e extensão, nomeadamente de localizações de risco e complicações locais, assim como de eventuais alterações endócrinas associadas, que permitam definir o prognóstico e o adequado tratamento.

CC120 – HIPOACUSIA NEUROSSENSORIAL – UMA MANIFESTAÇÃO RARA DE VASCULITE

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Introdução: A granulomatose eosinofílica com poliangeíte (GEP) é uma vasculite rara de pequenos e médios vasos. Os órgãos mais afetados são o pulmão, o trato gastrointestinal, a pele, o coração e o sistema nervoso. O atingimento dos nervos cranianos como manifestação inicial é extremamente rara. Os autores apresentam um caso de GEP com uma apresentação inicial de deficiência auditiva e polineuropatia severa.

Caso clínico: Homem 68 anos, internado para esclarecimento de quadro de défice motor e parestesias de ambos os membros inferiores com agravamento progressivo e hipoacusia bilateral desde há 2 meses. Referia também astenia e febre vespertina com 1 semana de evolução. Apresentava história de asma e sinusite desde há um ano. Sem outras queixas sistémicas associadas. Ao exame objetivo apresentava força muscular de grau 5 dos membros superiores, grau 3 nos músculos proximais e distais dos membros inferiores, com hipostesia nos dermátomos L4, L5 e S1.

O estudo complementar mostrou: Leucocitose 18G/L e Eosinofilia 7,2 G/L, PCR 8,3mg/dl, *VS* 40mm/h, pANCA: positivo forte, anti-MPO 80 U, IgE total 478, ANAs e ENAs negativos. Electromiografia: polineuropatia sensitiva e motora axonal compatível com neuropatia vasculítica. Tomografia computadorizada dos seios peri-nasais revelou alterações sugestivas de pansinusopatia. Foi observado por Otorrinolaringologia tendo sido diagnosticado hipoacusia bilateral de tipo neurossensorial relacionada com neuropatia bilateral do VIII par craniano. Realizou biópsia de nervo que revelou lesões de neuropatia axonal aguda, presença de raros eosinófilos e lesões de vasculite compatíveis com neuropatia vasculítica. Foi assumido o diagnóstico de GEP com um BVAS de 22.

O doente iniciou terapêutica de indução com pulsos

de ciclofosfamida na dose de 15mg/Kg, com boa resposta clínica e analítica.

À data de alta o doente apresentava-se apirético, sem queixas constitucionais, com normalização da fórmula leucocitária (Leucócitos 10,0 G/L Eosinófilos 1,0 G/L) e dos parâmetros inflamatórios (PCR: 0,4 mg/dL; *VS*: 10 mg/dL).

Conclusão: Ao apresentar este caso os autores pretendem ressaltar a grande variabilidade de apresentações clínicas que esta doença multissistémica pode apresentar. Conforme a literatura o envolvimento dos nervos cranianos é uma manifestação muito rara na granulomatose eosinofílica com poliangeíte.

CC131 – SÍNDROME DE MIKULICZ COMO FORMA DE APRESENTAÇÃO DE SARCOIDOSE

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Introdução: A Sarcoidose é uma patologia granulomatosa multissistémica que pode afetar qualquer órgão, mais frequentemente, o pulmão e os gânglios linfáticos intra-torácicos[1]. Entre as manifestações extrapulmonares, contam-se as músculo-esqueléticas com quadros de oligo e poliartrite que podem constituir sintomas de grande relevo[2] pelo que, numa consulta de Reumatologia, no diagnóstico diferencial, esta situação clínica é muitas vezes considerada. Outras formas de apresentação como a de um Síndrome de Mikulicz, implicando diagnóstico diferencial com doenças do tecido conetivo, em particular com o Síndrome de Sjögren, podem também ser observadas.

Objetivo: Os autores descrevem um caso de Sarcoidose de apresentação rara, salientando a importância das formas atípicas de apresentação de Sarcoidose.

Caso Clínico: Doente do sexo feminino, 28 anos de idade, saudável até agosto de 2016, altura em que iniciou quadro de edema palpebral bilateral, indolor, insidioso, associado a xeroftalmia, mas sem xerostomia ou sintomas constitucionais concomitantes. Posteriormente, notou tumefação parotídea bilateral, sem cólica salivar ou febre. Foi observada em consulta de Oftalmologia que referenciou para consulta de Reumatologia, com a suspeita de Síndrome de Sjögren.

Na observação, constatado edema palpebral superior bilateral marcado, tumefação parotídea bilateral e simétrica, de consistência duro-elástica, não dolorosa à palpação e normalidade do restante exame objetivo. Analiticamente, de salientar normalidade do hemograma, dos parâmetros de bioquímica de função hepática e renal, dos valores de IgG4, anti-SS-A e anti-SS-B negativos e elevação ligeira da ECA.

A radiografia de tórax evidenciou algumas imagens hipotransparentes, ovaladas e infra-centimétricas, perihilares, distribuídas bilateralmente. A TC pulmonar de alta resolução confirmou a presença de adenopatias hilares bilaterais e espessamento irregular micronodular do interstício com predileção pelos terços médios e a biópsia de uma glândula lacrimal, revelou granulomas compatíveis com Sarcoidose.

Discussão/Conclusão: A síndrome de Mikulicz, caracterizada pela tumefação simétrica e não dolorosa das glândulas lacrimais e parotídeas[3], é uma entidade pouco frequente que se pode associar a várias situações clínicas como tuberculose, sarcoidose e doenças linfoproliferativas[3].

A doença de Mikulicz é atualmente considerada como fazendo parte de um espetro mais alargado da doença relacionada com IgG4[4] que, além do envolvimento das glândulas salivares e lacrimais, pode incluir muitas outras manifestações[5].

Pretendeu-se alertar para uma das formas raras de apresentação da Sarcoidose, implicando diagnóstico diferencial com o Síndrome de Sjögren, com a doença relacionada com IgG4 e com doenças linfoproliferativas.

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CC75 – EFFICACY AND SAFETY OF IMATINIB IN SYSTEMIC SCLEROSIS – A CURIOUS CASE REPORT

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Introduction: Preclinical studies suggest that selective tyrosine kinase inhibitors that target c-Abl, platelet-derived growth factor receptor or Src kinases, such as Imatinib, might prevent or even induce regression of established fibrosis in Systemic Sclerosis (SSc). Despite several case reports, case series and uncontrolled studies reporting regression of fibrosis and good tolerability with Imatinib, subsequent clinical studies showed that Imatinib was poorly tolerated, and a large number of moderate/severe adverse events seemed to restrict its use in SSc patients.

Case Report: A 42 year-old female had diffuse cutaneous SSc for 12 years. Cutaneous, pulmonary and gastric involvement were present without renal manifestations. Antinuclear antibodies with a nucleolar pattern and a Scl-70 antibody were present in serum. Throughout the years, the disease progressed, mainly with dermal and pulmonary fibrosis, despite treatment with immunosuppressive agents such as methotrexate and cyclophosphamide.

As a result, in 2012, the patient presented with sclerodactyly, digital tip ulcers and pitting scars, Raynaud's phenomenon, telangiectasia and abnormal nailfold capillaries. At that time, the modified Rodnan Skin Score (mRSS) was 16 out of 51. Gastric involvement was characterized by esophageal dysmotility and gastric-esophageal reflux disease documented by upper tract endoscopy. The thoracic tomography (TT) revealed an interstitial lung disease pattern, namely non-specific interstitial pattern, with ground glass opacities. The pulmonary function tests (PFT) documented a normal Forced Vital Capacity (FVC) and a decreased carbon monoxide diffusion capacity (DLCO) - 78%. The transthoracic echocardiogram quantified a pulmonary artery systolic pressure (PASP) of 31 mmHg - slightly elevated, justifying adjustment of drug regimen. Concomitant a diagnosis of Chronic Myeloid Leukemia (CML) was made and therefore the patient was started on Imatinib 400 mg/day alone, with a positive response and CML entered a chronic phase.

In the last 4 years, after Imatinib start, SSc progression stabilized without further need for other immunosuppressive therapy. A subjective improvement of skin tightness and hands movement was reported by the patient and the mRSS remains similar at present time. FCV and DLCO values on PFT stayed stable. No further progression of pulmonary fibrosis was evident on TT and PASP documented on transthoracic echocardiogram suffered no aggravation.

Currently, after 54 months of treatment, Imatinib remains well-tolerated and no adverse events were registered. Neither SSc or CML had need for other drug agents.

Conclusion: This report has obvious similarities with those described in the literature and supports Imatinib's efficacy in the treatment of SSc. Additionally, a significant association with CML took place, potentiating Imatinib's use. No major adverse effects were registered and the drug was well tolerated, allowing for treatment of both diseases. Our patient had timely and formal set indication for treatment with Imatinib, contrary to selected clinical trial's population. Also, a less severe form of SSc may explain reported efficacy and safety.

CC193 – BASIC CRYSTAL PHOSPHATE ARTHROPATHY DIAGNOSED BY ULTRASOUND GUIDED BIOPSY?

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Over the last decades, a growing number of publications have been showing the advantages of ultrasound guide biopsies. This easy to perform technique is useful to elucidate less clear diagnoses and to evaluate activity in rheumatic diseases such as rheumatoid arthritis[1]. Concerning our growing experience on this technique, we present the first case of a proximal interphalangeal joint guided biopsy ever performed in Portugal, and highlight its important application in a difficult diagnostic setting.

We present the case of a 54 years old woman, working at a shoe store who presented with an history of six years of polyarthritis involving proximal interphalangeal joints (PIP), shoulders, elbows and knees and biphasic Raynaud phenomenon. ANA, rheumatoid factor and ACPA were negative. She had no radiographic evidence of bone erosion or of chondrocalcinosis.

Although she had normal ESR (19 mm/h) and CRP (0.38 mg/dl), seronegative rheumatoid arthritis diagnosis was established and she started therapy with non-steroidal anti-inflammatory drugs (NSAIDs), prednisolone and methotrexate. She was intolerant to higher doses of methotrexate and did not respond to triple therapy nor to leflunomide. Having in considera-

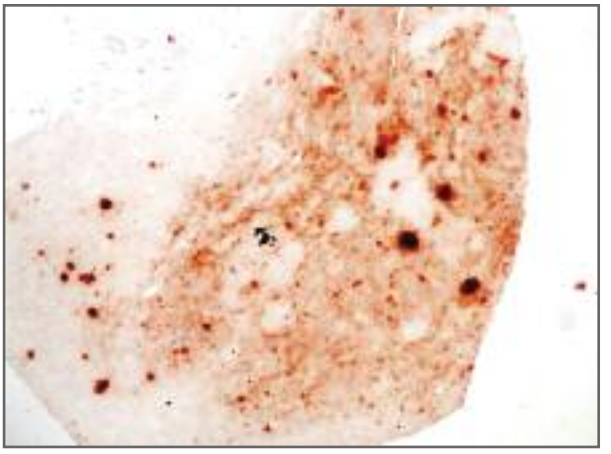

FIGURE. Basic Calcium phosphate deposits highlighted in red by the Alizarin stain (Alizarin red, 100x)

tion four years of difficult to treat arthritis the patient was proposed to biologic therapy with etanercept in 2016. She went into latent tuberculosis' screening, according to the national guidelines, with the need of nine months of izoniazide therapy which eventually resulted in some hepatic toxicity.

After a 6-month period follow-up, no significant benefit was noted with a DAS-28-4V variation of 0.44, from 4.68 to 4.24. An ultrasound evaluation was performed and the results are in Table 1. Few osteophytes were identified and distal interphalangeal joints were spared.

Since she had seronegative RA, no elevation of inflammatory markers and refractory disease, an alternative diagnosis was thought. An ultrasound-guided synovial biopsy of the 2nd left PIP was then performed. Microbiologic cultures were negative. Histological evaluation allowed the visualization of sinovial hyperplasia, fibrine exsudate but a scarce chronic inflammatory infiltrate, with no lymphoid aggregates or granulomas. Extensive deposition of basic calcium phosphate (BCP) over the synovium was identified.

Growing evidence is linking BCP crystal synovial depositions in osteoarthritis (OA). Although not easy to identify, they are known to activate inflammatory cells and to promote a proinflammatory medium which ultimately leave to matrix degradation and bone destruction and remodeling[2,3].

The acquisition of synovial tissue and its careful histologic study have brought light into a misunderstood clinical case, and help to corroborate the need for a careful and comprehensive/multidisciplinary diagnostic approach in Rheumatology.

TABLE I. ULTRASOUND FINDINGS IN DISEASE ACTIVITY ASSESSMENT AFTER 6-MONTH PERIOD ON BIOLOGIC THERAPY

	Left	Right
THUMB	Grade 2	Grade 1
2nd PIP	Grade 3 + Doppler 2	Grade 3 + Doppler 2
3th PIP	Grade 2	Grade 1
4th PIP	Grade 2	Grade 1
5th PIP	Grade 1	No sinovitis

CC46 – UVEÍTE COMO FORMA DE MANIFESTAÇÃO DE VASCULITE

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Introdução: A granulomatose com poliangeiite é uma doença sistémica potencialmente letal caracterizada por vasculite necrotizante dos pequenos vasos. Com um pico de incidência entre os 64-75 anos de idade, caracteriza-se pelo envolvimento das vias aéreas superiores, pulmões e rins. As manifestações oculares da doença ocorrem em aproximadamente 1/3 dos doentes. A uveíte é uma manifestação rara na granulomatose com poliangeiite, verificando-se apenas em 3% dos doentes. Usualmente esta ocorre em associação com a escleríte, sendo denominada de esclerouveíte, tendo um pior prognóstico ocular.

Caso Clínico: Homem, 43 anos, internado para esclarecimento de olho vermelho (com 2 meses de evolução, tendo sido medicado com antibioticoterapia tópica sem melhoria) e poliartralgias periféricas, aditivas e simétricas com 1 mês de evolução, com melhoria discreta com AINE's. Associadamente referia cansaço fácil, astenia, epistáxis e febre vespertina com 1 semana de evolução. Sem outras queixas sistémicas.

À entrada destacava-se a presença de olho vermelho à esquerda e artrite da 2a IFP mão esquerda e 3ª IFD mão direita. Observado por oftalmologia sendo diagnosticada uveíte anterior e medicado com dexametasona tópica em dose de desmame ocorrendo melhoria progressiva das queixas oculares.

Do estudo analítico à entrada destacava-se PCR: 5,19 mg/dL; *VS*: 61mm/h; Cr: 6,68 mg/dL; BUN: 59,2 mg/dL; Hb: 11,0; sumária de urina: Eritrócitos: 72

mg/dL; Proteínas: 1000mg/dL. Pedida colaboração da Nefrologia para realização de biopsia renal.

Do restante estudo complementar realizado destaca-se Ac. Anti-cANCA: positivo forte; Ac. Anti-PR3: positivo 108U; ANAs negativos; Anti-DNA ds: negativos, Imunoglobulinas: sem alterações e serologias negativas; Cr urina 24h: 58,8 mg/dia; proteínas: 356,5 mg/dia; relação proteínas/creatinina: 6063. A biopsia renal demonstrou: Rim com aspetos de glomerulonefrite necrotizante crescêntica (crescentes em 50% dos glomérulos), pauci-imune, enquadrável em glomerulonefrite relacionada com ANCA, sendo assumido o diagnóstico de granulomatose com poliangiite. BVAS inicial de 27.

Após resultado da biópsia renal iniciou terapêutica de indução com pulsos de ciclofosfamida na dose de 15mg/Kg e prednisolona 1mg/Kg/dia, com boa resposta clínica e analítica.

À data de alta o doente apresentava um score BVAS de 12, sem queixas constitucionais, apirético, com melhoria da função renal (Cr: 2,58 mg/dL e BUN:48,4 mg/dL) e dos parâmetros inflamatórios (PCR: 0,11 mg/dL; *VS*: 8 mg/dL).

Seis meses após iniciada terapêutica o doente mantinha melhoria clínica (BVAS 7) e analítica com *VS*:7 mg/dL; PCR: 0.17 mg/dL; Cr: 1.5 mg/dL. Iniciou terapêutica de manutenção com rituximab.

Conclusão: Os autores pretendem alertar para a dificuldade diagnóstica e necessidade de considerar a granulomatose com poliangiite no diagnóstico diferencial de múltiplas entidades sistémicas ou mesmo de órgão. Neste caso destaca-se a uveíte anterior como manifestação clínica inicial de vasculite sistémica.

CC51 – RA CASES OF INPATIENTS WITH SUSPECTED MYOCARDIAL INFARCTION DIAGNOSIS

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Background: Inflammation is a corner stone in both rheumatic disease and heart disease. RA being the most common rheumatic disease is the best-studied concerning cardiovascular disease. Some drugs to treat RA are able to control inflammation and reduce CV risk. However, steroids do the opposite due to the adverse metabolic effects, which offset the anti-inflammatory effects. Takotsubo cardiomyopathy (TTC) is an acute cardiac condition characterized by transient left ventricular dysfunction with wall motion abnormalities, usually apical akinesis and ballooning. Patients often present with chest pain, ST-segment elevation on EKG, and elevated cardiac enzyme levels that increase the suspicion of a myocardial infarction. Cardiac benign lipomatous lesions include neoplastic, congenital, and reparative phenomena of encapsulated mature adipose cells. The limited evidence available, due to rarity, supports their neoplastic classification.

Objectives: To identify rare cardiac causes for RA patient hospitalization.

Methods: Analysis of medical records from inpatients diagnosed with RA and myocardial infarction.

Results: Report of two cases, each with established RA diagnosis and acute onset of cardiac symptoms. CASE 1. A 43-year-old man presented in the ER with the suspicion of an acute coronary syndrome (ACS), specifically an ST elevation myocardial infarction (STEMI). However, cardiac catheterization revealed permeable coronary arteries and an aneurysm involving the anterior and apical walls of the left ventricle. 3 Months later, on myocardial perfusion scintigraphy using 99mTC-tetrofosmin the patient presented necrosis of the anterior wall with peri-necrosis ischemia. CASE 2. A 61-year-old man presented in the ER with chest pain of acute onset. EKG was normal, chest X-ray showed augmented cardiothoracic index, and cardiac enzymology was elevated. Echocardiography revealed preserved global systolic function, septum hypertrophy, basal posterior wall dyskinesia, and a large mass in the left ventricle. Further study supports the diagnosis of a lipoma for lack of malignant characteristics.

Conclusions: Rare cardiac events associated with RA are indeed infrequent. Causality cannot be established even though the correlation may exist, especially because we cannot be certain of which pathology was established primarily. Our report supports the benefit for programmed periodic screening of cardiac health.

GRUPO 15

CC148 – LÚPUS ERITEMATOSO SISTÉMICO E LEUCEMIA DE LINFÓCITOS GRANDES GRANULARES

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Introdução: A leucemia de linfócitos grandes granulares (LLGG) é uma doença linfoproliferativa, geralmente indolente, associando-se, na maioria dos casos (74%), a doenças imunomediadas. Estas podem surgir sincronamente com a LLGG ou durante a sua evolução[1]. A artrite reumatóide é a doença mais frequentemente descrita em associação a esta situação clínica. Outras patologias como o lúpus eritematoso sistémico (LES), embora mais raramente, também podem estar associadas[1].

Apresenta-se o caso clínico de um doente com LLGG, no qual, ao fim de 5 anos de evolução, surgiu um quadro de LES.

Caso Clínico: Doente do sexo masculino, de 44 anos de idade, em vigilância no Instituto Português de Oncologia do Porto com diagnóstico de LLGG desde 2011, manifestada por neutropenia, estável na sua evolução, não tendo tido indicação para tratamento específico até ao surgimento do quadro actual.

Em maio de 2016 foi referenciado à consulta de Reumatologia por quadro de poliartrite simétrica e aditiva, envolvendo médias e pequenas articulações (punhos, mãos e pés), com 2 meses de evolução. Adicionalmente referiu apenas episódios de lesões cutâneas eritematosas e pruriginosas nos membros superiores, sem fotossensíbilidade, que melhoravam com a toma de anti-histamínico. Analiticamente apresentava neutropenia e linfocitose em valores sobreponíveis aos previamente conhecidos, velocidade de sedimentação de 33 mm e proteína C reativa normal, parâmetros de função hepática e renal, incluindo sedimento urinário, sem quaisquer alterações, fator reumatóide positivo e anti-CCP negativo, anticorpos anti-nucleares de 1/160, anti-SSA positivo, mas com Anti-ADN e anti-Sm negativos. Constatada ainda diminuição com complemento C3 (79mg/dL) e, embora sem história de eventos trombóticos, tinha anticorpos anti-fosfolípideo positivos (anticardiolipina e β2glicoproteina-1), em duas avaliações, preenchendo assim critérios de diagnóstico de LES. Iniciou terapêutica com prednisolona em baixa dose e, por ter apenas melhoria parcial, iniciou posteriormente hidroxicloroquina 400mg/dia e metotrexato (MTX) 10mg/semana, com regressão completa das queixas álgicas e dos sinais inflamatórios articulares, mantendo-se, oito meses depois do início desta terapêutica, clinicamente bem, sem intercorrências infeciosas e com melhoria da neutropenia e da linfocitose prévias, sugerindo benefício do MTX na leucemia de LGG.

Discussão/ Conclusão: A associação da LLGG às doenças imunomediadas parece estar relacionada com fatores etiopatogénicos comuns, em particular, com as concentrações de interleucina-18[1].

Num estudo com objectivo de avaliar neoplasias hematológicas em doentes com LES, é relatado um caso semelhante ao apresentado tendo sido também estabelecido diagnóstico de LES num doente com LLGG com 3 anos de evolução.

As terapêuticas imunossupressoras mais utilizadas na LLGG, para controlo da neutropenia, são o MTX em baixas doses (10mg/m2/semana) e ciclofosfamida oral, com resposta em 50-75% dos doentes (1). A resposta observada neste doente, depois do início de MTX, está também de acordo com o descrito.

Assim, nas doenças imunomediadas em que se constate uma neutropenia persistente, um quadro de LLGG, deverá ser considerado.

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CC44 – SMALL VESSEL INVOLVEMENT IN TAKAYASU ARTERITIS – WHAT IS THE EXACT ROLE FOR BIOLOGICS?

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Introduction: Takayasu arteritis (TA) is a large vessel vasculitis (LVV) affecting predominantly young women, causing inflammation of aorta and its major branches, resulting in stenosis/occlusion and aneurysm formation. This rare disorder rarely affects small vessels. Conventional disease modifying agents (cDMARDs) are sometimes insufficient in management

but new inflammatory markers for TA have opened new therapeutic possibilities for biologic treatment (BT).

Aims: We report two cases of TA with extremely rare small vessel affection (SVA): cutaneous vasculitis along with sensorineural hearing loss (SHL) and retinal vasculitis, refractory to cDMARDs and requiring BT.

Clinical Cases: Case 1: 37-year-old woman diagnosed with TA in her twenties, presented with intermittent left arm claudication and high inflammatory markers. Magnetic resonance angiography revealed significant stenosis of left subclavian and both common carotids. Initially started prednisolone 1mg/Kg/day (d) and methotrexate 25mg/week (w), with no improvement. Monthly pulses of cyclophosphamide and later azathioprine were then administered with stable clinical and serum markers improvement. At age 32, cutaneous ulcers appeared on both legs. Biopsy showed a granulomatous dermatitis with central necrosis. After tuberculosis exclusion she was again on prednisolone 1 mg/Kg/d; after 2 years, ulcers persisted and she began infliximab 5 mg/kg 8/8w along with methotrexate 10mg/w with complete cutaneous and systemic remission. Recently, 2 years after infliximab, she presented with tinnitus and sudden right SHL. Again PDN 1mg/Kg/d was started with rapid tapering, achieving remission. Case 2: 19-year-old black woman diagnosed one year earlier with TA, involving ascending and descending aorta, aortic arch, brachiocephalic trunk, both common carotids with critic stenosis at the right subclavian and carotid arteries requiring elective surgery. The patient had been treated with methotrexate 25mg/w and high doses of prednisolone 60mg/d with gradual possible tapering to 10mg/d. Despite treatment she was found with a Cushingoid habitus, having persistent carotidynia and right superior limb marked claudication, along with very high inflammation markers. Tocilizumab was indicated in order to achieve disease remission, allow prednisolone tapering and ultimately improving elective surgery success rate. While waiting for tocilizumab she developed acute ocular photophobia and blurred vision related to left anterior uveitis and bilateral retinal vasculitis, more extensive in the left eye.

Discussion: Inner ear, cutaneous and retinal vasculitis are extremely rare in TA. We found only few reports on SHL and cutaneous granulomatous involvement. Regarding ocular manifestations those are most often due to chronic hypoperfusion related to common carotid involvement or hypertensive retinopathy. Despite reports of uveitis, scleritis and glaucoma, retinal vasculitis (affecting large retinal vessels) is extremely rare. We report two cases in which rare manifestations of SVA in TA were refractory to steroids and cDMARDs, ultimately requiring BT. Case series and observational studies support the use of anti-tumor necrosis factor therapy in refractory TA, in particular infliximab. A small number of patients refractory to infliximab have been successfully treated with tocilizumab and rituximab, however indication for these agents in LVV with SVA is unusual. Despite growing evidence for BT, the majority of data hasn't assessed whether they should be considered and what is the most appropriate agent in SVA of LVV.

CC81 – CRIOGLOBULINÉMIA ASSOCIADA AO VIH: CASO RARO E DESAFIO TERAPÊUTICO

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Introdução: A crioglobulinémia é considerada uma doença rara, cuja verdadeira prevalência permanece desconhecida. A crioglobulinémia mista clinicamente significativa tem uma prevalência estimada de 1:100000, predominando em mulheres, numa razão de 3:1. Até 80-90% dos doentes com crioglobulinémia mista têm infeção crónica pelo vírus da Hepatite C (VHC). As crioglobulinas são frequentemente detetadas no contexto da infeção pelo vírus da Imunodeficiência Humana (VIH), mas raramente se associam a vasculite crioglobulinémica. O tratamento é complexo e varia consoante a etiologia e gravidade da doença.

Caso clinico: Apresenta-se o caso de um homem de 64 anos, com história de hipertensão arterial, diabetes *mellitus* tipo 2 e infeção VIH-1 diagnosticada em 1994, medicado com terapêutica antirretroviral tripla (emtricitabine/tenofovir/raltegravir). Em março de 2016 iniciou quadro de lesões cutâneas eritemato-violáceas nos dois pés, artralgias dos joelhos de ritmo inflamatório e cansaço generalizado. A púrpura cutânea evoluiu para ulceração nos calcâneos e polpa digital dos dedos dos pés. Analiticamente destacava-se: velocidade de sedimentação de 50 mm/h e crioglobulinas positivas (IgA, IgG e IgM). O restante estudo foi normal/negativo, inclusive vírus Hepatite B e C, complemento C3/C4, fa-

tor reumatóide, anticorpos anti-nucleares (ANAs) e anticorpos anti-antigenos nucleares extraíveis (ENAs). Desde o início do quadro clínico o doente apresentou carga viral VIH-1 <20 cópias/ml e linfócitos T CD4+ > 500 células/ul. Realizou-se biópsia de úlcera ao nível do calcâneo cujo resultado veio confirmar o diagnóstico de crioglobulinémia mista. O doente não apresentou envolvimento hepático ou renal. Iniciou-se corticoterapia com prednisolona 1mg/kg/dia (60mg/dia, que realizou durante 1 mês) registando-se melhoria clínica e boa evolução na cicatrização das úlceras cutâneas. Procedeu-se ao desmame progressivo da prednisolona até 10 mg/dia, sem intercorrências.

Segundo a literatura, os corticóides continuam a ser a 1ª linha no tratamento da vasculite associada ao VIH. A terapêutica imunossupressora (Rituximab, Ciclofosfamida) e a plasmaferese, utilizados mais frequentemente no tratamento da crioglobulinémia associada ao VHC, devem ser evitados sempre que possível uma vez que podem permitir o desenvolvimento de infeções oportunistas graves, especialmente se a contagem de linfócitos TCD4+ <200 células/ul. Em situações em que a infeção VIH não se encontra controlada o tratamento âncora reside na supressão da replicação viral do VIH.

Conclusão: Trata-se de um caso raro de um homem com crioglobulinémia mista grave associada ao VIH. Revela-se um verdadeiro desafio a nível terapêutico, pois tratando-se de uma associação rara não existem recomendações para o seu tratamento.

CC88 – IS THERE A ROLE FOR ANTI-CD20 THERAPY IN SPONDYLOARTHRITIS?

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Introduction: Rituximab (RTX) is a chimeric monoclonal anti-CD20 antibody that targets mature B lymphocytes, approved for the treatment of rheumatoid arthritis (RA) refractory to anti-tumour necrosis factor (TNF). Whether RTX may be effective in spondyloarthritis (SpA) and psoriatic arthritis (PsA) is presently unclear. RA and SpA/PsA have different pathogenic mechanisms and rarely occur together.

Aim: A clinical report of a woman with RA and possible coexisting SpA/PsA, refractory to anti-TNF and successfully treated with RTX.

Clinical Case: A 33-year-old woman presented in her early twenties, with systemic complains, fever, weight loss, stiffness and symmetric polyarthritis of shoulders, elbows, wrists and knees along with high inflammatory markers. As rheumatoid factor (RF) and antibodies to cyclic citrullinated peptides (anti-CCP) were present in serum a diagnosis of RA was performed, and she was started on prednisolone and methotrexate (MTX) 20mg/week, with partial benefit. One year after (DAS28-PCR=5.1), she began etanercept 50mg/week without significant improvement for 15 months. She was then switched for infliximab 3mg/Kg every 8 weeks during 9 months, afterwards raised to 5mg/Kg every 6 weeks, along with MTX 20 mg/week maintaining a disease activity score persistently high (DAS28--PCR=4.97). At that time, while she was also taking celecoxib, severe cholestatic hepatitis developed, and all drugs were stopped. One year later, RA persisted active and RTX on monotherapy was started. Eight weeks after the first RTX treatment she developed symmetric synovitis of second and third distal interphalangeal (DIP) hand joints and a right third finger dactylitis. RTX was extend along 3 cycles, resulting in good disease response at 10 months (DAS-28--PCR=2.08). DIP joint involvement persisted with radiographic structural damage, without any other joint complain. Recently, she developed tibialis anterior tenosynovitis and bilateral Achilles enthesitis. Considering the atypical joint involvement and enthesitis, a new hip radiographic was performed, showing right sacroiliac joint irregularities. Magnetic resonance imaging revealed asymptomatic bilateral sacroiliitis with left bone marrow oedema. A diagnosis of SpA was made, eventually psoriatic arthritis without psoriasis (no psoriasis noticed in the family), in overlap with RA.

Discussion: Coexistence of RA and SpA/PsA is rare. We report a TNF inhibitor failed patient, successfully treated with RTX that developed a curious clinical--pathological RA/PsA-like expression: large and DIP symmetric joint involvement with dactylitis and asymptomatic sacroiliitis, without psoriasis along, with RF/anti-CCP present in serum. Safety and efficacy of RTX in RA has been perfectly shown, but data on SpA and PsA are limited. Case reports and open-label studies have demonstrated modest clinical benefit in some patients with SpA and PsA. The pathophysiology and clinical features of SpA and PsA are distinct from RA as evidenced by differing clinical features. The efficacy of RTX, on joint inflammation, in our patient, suggests a

role for B cells in SpA/PsA. Some data have highlighted the presence of B cell lymphoid aggregates in PsA synovial tissues. Nonetheless, B cells may play a role in antigen presentation in SpA.

Controlled studies will be needed for more definitive understanding of RTX effect in SpA/PsA.

Conclusion: This report of a rare association between RA and SpA/PsA, treated with RTX, suggests a possible role for anti-CD 20 blockage in patients with SpA/PsA refractory to established therapeutic regimens.

CC158 – A MIMETIZAÇÃO DE UMA MIOSITE: UM CASO DE DISFERLINOPATIA

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Introdução: Fraqueza muscular proximal e elevação das enzimas musculares são típicas das miopatias inflamatórias idiopáticas. Porém, outras causas de miopatias, hereditárias ou adquiridas, podem apresentar-se de modo semelhante.

Caso clínico: Mulher de 30 anos, empregada de padaria, em aparente estado de saúde até há 3 anos, altura em que inicia mialgias generalizadas e diminuição progressiva da força muscular de predomínio proximal, inicialmente dos membros inferiores, com progressão para os superiores. Quando se apresentou em consulta de Reumatologia, estava medicada com prednisolona (PDN) 20 mg/dia pelo médico de família há um mês, referindo alguma melhoria. Referia ainda acrocianose e queixas esporádicas de fotossensibilidade e xeroftalmia. Ao exame objetivo, destacava-se: marcha miopática, incapacidade para se levantar de cócoras, ligeira atrofia muscular da coxa esquerda e discreta diminuição da força muscular do membro inferior esquerdo de predomínio crural (grau 4/5). Era portadora de análises sem elevação de *VS* e PCR, com elevação de TGO, CK, aldolase e LDH (152 U/L, 3396 U/L, 69 U/L e 995 U/L, respetivamente) e ANA negativo. Internou-se para esclarecimento diagnóstico e despiste de manifestações sistémicas. Realizou raio X tórax, TC da coluna lombar, ecografia abdominal, raio X e RMN da bacia, sem alterações de relevo. A capilaroscopia revelou achados sugestivos de conectivite e a eletromiografia era compatível com miopatia, com alterações mais marcadas nos músculos proximais dos membros inferiores, sendo sugestivas de doença inflamatória do músculo. Anti-dsDNA, anti-RNP e anti-Jo-1 eram negativos. Considerando-se a hipótese de polimiosite, ajustou-se terapêutica com azatioprina até 150 mg/dia e PDN 15 mg/dia, verificando-se ligeira melhoria clínica e analítica, tendo alta. Nos meses seguintes, pelo agravamento da fraqueza muscular e a persistência da elevação das enzimas musculares, solicitou-se a biópsia muscular. Esta não evidenciou infiltrado inflamatório, mas revelou alterações de perfil predominantemente distrófico com padrão imuno-histoquímico compatível com uma disferlinopatia *(Limb Girdle Muscular Dystrophy,* LGMD tipo 2B). Assim excluída a miopatia inflamatória, suspenderam-se os imunossupressores e foi encaminhada para a consulta de doenças neuromusculares em Neurologia.

Discussão: Este caso ilustra a importância da biópsia muscular no diagnóstico diferencial das miopatias. A perceção inicial do quadro foi prejudicada pela ausência de avaliação clínica e analítica em Reumatologia antes do início da corticoterapia e pela subjetiva melhoria da força muscular com esta terapêutica. A favor da polimiosite, destacam-se ainda os achados à capilaroscopia e à eletromiografia. Pela refratariedade dos sintomas, apesar da optimização terapêutica, decidiu-se investigar outras hipóteses, como miosite por corpúsculos de inclusão ou distrofia muscular, através da biópsia muscular. Esta deve ser analisada em centros especializados, pois a avaliação histológica simples pode ser insuficente, porque infiltrados inflamatórios e necrose podem existir nas distrofias musculares, mimetizando uma polimiosite. O recurso à microscopia electrónica, estudos funcionais/metabólicos ou análise molecular permite estabelecer o diagnóstico definitivo. Porém, a dificuldade no seu acesso leva a que muitas vezes se coloquem hipóteses de diagnóstico e se inicie tratamento sem a confirmação. É necessário otimizar a relação com centros de referência em miopatias, para um diagnóstico definitivo em tempo útil, evitando terapêuticas desnecessárias.

CC123 – LINFOHISTIOCITOSE HEMOFAGOCÍTICA COMO FORMA DE APRESENTAÇÃO DE LÚPUS INDUZIDO POR ETANERCEPT

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Introdução: A Linfohistiocitose Hemofagocítica (LHH) é um síndrome potencialmente fatal, no qual ocorre ativação imunitária sistémica resultante da disfunção de macrófagos e células T citotóxicas. A forma secundária resulta de múltiplas etiologias desde infeciosas, neoplásicas, reumáticas sistémicas e farmacológicas, incluindo agentes biotecnológicos.
Caso clínico: Homem de 43 anos, com diagnóstico de artrite psoriática desde há 12 anos, medicado com etanercept há 4 anos, prednisolona 7,5mg/dia e naproxeno 1000mg/dia. Recorreu ao Serviço de Urgência por febre diária com 15 dias de evolução, associada a astenia, anorexia e perda ponderal de 8kg. Previamente, fora medicado com claritromicina durante 1 semana por suspeita de traqueobronquite, sem resolução da febre. Sem contexto epidemiológico relevante de infeção. Ao exame objetivo, apresentava febre (39ºc), hepatomegalia e poliartrite, sem lesões mucocutâneas, adenopatias ou outras alterações. Analiticamente, apresentava anemia microcítica (Hb 11g/dL), linfopenia (840/mm3), elevação da PCR (181mg/L) e *VS* (98mm/1ªh), haptoglobina normal, citocolestase (AST 114 U/L, ALT 165 U/L, GGT 79 U/L, FA 137 U/L, com bilirrubinas total/direta normais), elevação dos níveis de desidrogenase láctica (406 U/L), triglicerídeos (192 mg/dL) e ferritina (910ng/mL); coagulopatia (apTT e TP aumentados, sem consumo do fibrinogénio). A radiografia torácica não apresentava alterações e a ecografia abdominal demonstrou hepatoesplenomegalia homogénea. Foi internado no serviço de Reumatologia, suspendendo terapêutica com etanercept. Do estudo realizado, salienta-se: hemoculturas e urocultura negativas; serologias VIH, VHC/A e IgM CMV, EBV e parvovírus negativas; anti-HBc positivo com AgHBs negativo e DNA de VHB indetetável; ecocardiograma transtorácico normal e TC toracoabdominopélvico sem massas, abcessos ou adenopatias. Do estudo imunológico realça-se: ANA 1/320 padrão homogéneo, anti-histonas borderline, inibidor lúpico, prova de Coombs direta e β2glicoproteína IgG positivos, com anti-dsDNA e anticorpos para hepatites auto-imunes (LKM-1, LC-1, SLA/P) negativos e níveis de complemento normais. Após avaliação multidisciplinar e perante a persistência de febre, bicitopenia e citocolestase, foi submetido a biópsia hepática e da medula óssea. A histologia hepática evidenciou infiltrado inflamatório polimórfico nos lóbulos e ductos biliares; a histologia medular revelou presença de células histiocitárias contendo eritrócitos, traduzindo hemofagocitose, sem evidência de processo neoplásico, com estudos bacteriológico e micobacteriológico negativos. Foram efetuados os diagnósticos de Lúpus e LHH induzidos por terapêutica anti-TNFα, pelo que manteve suspensão de etanercept e iniciou prednisolona 0.5mg/kg e ciclosporina 2mg/kg, apresentando apirexia sustentada e normalização ulterior dos parâmetros analíticos.
Conclusão: O Lúpus induzido por anti-TNFα tem uma incidência descrita de 0,19-0,76% e a LHH secundária a biotecnológicos é uma entidade rara, estando apenas descritos cerca de 30 casos na literatura. O diagnóstico de LHH exige um elevado índice de suspeição clínica, assim como a exclusão de causas associadas, particularmente de quadros infeciosos subjacentes, descritos em 67% dos casos.

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CC102 – DOENÇA DE LYME E ARTRITE – PARA ALÉM DA SÍFILIS, UM OUTRO GRANDE IMITADOR

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Introdução: A doença de Lyme é uma infeção causada pela espiroqueta do género *Borrelia,* transmitida pelo artrópode Ixodes. O eritema *migrans* é uma manifestação patognomónica, mas está ausente em cerca de um terço dos doentes. O envolvimento músculo-esquelético ocorre em cerca de 60% dos casos e carateriza-se por artrite intermitente de médias/grandes articulações, estando também descrita a ocorrência de tenossinovite e dactilite.

Caso clínico: Homem de 42 anos, guia turístico, com viagens frequentes em contexto laboral, a última das quais em Abril de 2016, por zonas rurais no norte de Espanha. Em Maio, uma semana após infeção do trato urinário (sob ciprofloxacina), recorreu ao Serviço de Urgência (SU) por astenia, hiperémia conjuntival e artralgias inflamatórias intermitentes do punho esquerdo, joelhos e tibiotársica direita. Negava lesões cutâneas ou picada de carraça, queixas urinárias, exsudado uretral ou outra sintomatologia. Por suspeita de artrite gonocócica, fez uma toma de ceftriaxone 1g. Regressou ao SU por persistência do quadro, sendo internado no serviço de Medicina Interna. Do estudo efetuado, salienta-se: leucocitose (12 330 x 109/L); elevação da PCR (141 mg/L) e *VS* (41mm/1ªhora); PSA normal; pesquisa de DNA de *Neisseria gonorrhoeae* e *Chlamydia trachomatis* na urina negativas, uroculturas e hemoculturas negativas; serologias de *Borrelia* (Western Blot), Brucella (reação de Wright), VIH, VHB e VHC negativas; ecografia abdomino-pélvica e radiografia torácica sem alterações relevantes. Por suspeita de artrite reativa, iniciou prednisolona 20mg e posteriormente sulfassalazina 1g. Em meados de Junho, foi internado no serviço de Reumatologia por manutenção das queixas articulares. Apresentava poliartrite assimétrica, dactilite e tenossinovite dos tendões flexores da mão esquerda. Do estudo efetuado, realça-se: repetição de serologia para *Borrelia* IgM positiva, IgG negativa (Western Blot); reação TPHA negativa. Perante o diagnóstico de Doença de Lyme, cumpriu terapêutica com Doxiciclina 200mg/dia durante 30 dias. Em Setembro, foi re-internado por quadro subjetivo de disfunção cognitiva com 1 mês de evolução, sem défices neurológicos objetivados. Realizou punção lombar, cuja serologia e pesquisa de DNA de Borrelia no líquor foram negativos. Foi também objetivado nódulo axilar esquerdo de 15 mm, cujo estudo ecográfico levantou a hipótese de ser de origem neuronal. Realizou RMN axilar que evidenciou achados sugestivos de tumor de bainhas nervosas, com sinal heterogéneo e múltiplas áreas quísticas. A pesquisa de DNA de *Borrelia Burgdorferi* por punção aspirativa nodular foi positiva e a eletroneuromiografia revelou lesão desmielinizante do nervo cubital no cotovelo, sem lesões do plexo braquial. Foi submetido a excisão nodular cuja histologia revelou tratar-se de schwannoma com infiltrado linfoplasmocitário e histiocitário localizado em zona cística. Perante o diagnóstico de neuroborreliose periférica, cumpriu 14 dias de Ceftriaxone 2g. Seis meses após do início do quadro, mantinha artralgias intermitentes, porém com resolução da artrite e dos parâmetros analíticos inflamatórios.

Conclusão: O caso exposto retrata o desafio diagnóstico e investigação clínica diferencial da Doença de Lyme. A produção de anticorpos IgM anti-*Borrelia* inicia-se 2-4 semanas após a infeção, pelo que o seu doseamento nas primeiras semanas poderá ser falsamente negativo. O diagnóstico de neuroborreliose (reportado em 15% dos casos) realça igualmente a importância da avaliação global destes doentes.

GRUPO 16

CC58 - INTRAVENOUS EPOPROSTENOL – A PROMISING THERAPY IN SCLERODERMA DIGITAL VASCULOPATHY

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Background: Vasculopathy is a key point in the pathogenesis of Systemic Sclerosis (SSc). Raynaud phenomenon is the most characteristic manifestation and can in severe cases lead to ischemic digital ulcers (DU). Pulmonary arterial hypertension (PAH) is also a consequence of vascular injury and inflammation and can be a potentially life-threatening complication.
Epoprostenol is a prostacyclin analogue used for the treatment of severe PAH. More recently this drug has also been considered a promising therapeutic option for digital vasculopathy.

Methods: We report the case of a 64-years-old caucasian female diagnosed with SSc at the age of 49-years, anticentromere antibody-positive, with significant digital vasculopathy and ulcers. She was under treatment, in another institution, with hydroxychloroquine, acetylsalicylic acid, pentoxifylline, nifedipine and alprostadil every 5 weeks. She was referred to our hospital with 2-months complaints of progressive fatigue and dyspnoea with orthopnoea. On physical examination, she had sclerodactyly with digital ulcers in several fingers, one with signs of infection, and crackles in both lung bases. Echocardiography revealed an estimated pulmonary artery systolic pressure of 108 mmHg, dilation of right heart chambers with hypertrophy of right ventricle walls, good left ventricular sys-

tolic function and pericardial effusion. N-terminal pro-brain natriuretic peptide (NTproBNP) was 3952 pg/mL. Pulmonary function tests showed forced vital capacity of 80% and carbon monoxide diffusing capacity of 36%; pulmonary CT scan demonstrated moderate pericardial effusion, bilateral pleural effusion and ground-glass opacity in more than 20% of the parenchyma. During 6-minute walk test (6MWT) she had important desaturation and gasometry at rest demonstrated severe hypoxemia. Pulmonary embolism was excluded by lung ventilation/perfusion scintigraphy.

Discussion: The patient was submitted to right heart catheterization that confirmed pulmonary hypertension group 1 (mean pulmonary arterial pressure 41 mmHg; pulmonary vascular resistance 9.3 U Wood; pulmonary capillary wedge pressure 9 mmHg). She initiated intravenous epoprostenol at 2 ng/kg/min with progressive dose titration (target dose 40 ng/kg/min). For serositis and lung involvement prednisolone (0.5mg/kg/day) was added.

She was re-evaluated after 1 month of therapy with almost all DU healed and without fatigue and dyspnoea. There was a marked reduction in NTproBNP (592 pg/mL), improvement in 6MWT outcomes and no need for supplementary oxygen.

Conclusion: DU are a major concern in patients with SSc and are associated with pain and reduced hand function. Besides, they can complicate with local infection, osteomyelitis, gangrene or amputation.

Prostacyclin analogues are potent vasodilators that also inhibit platelet aggregation. Its use in PAH is well--known, but more recently they have been recognized as a well-succeeded treatment for DU in some specific patients. Adverse effects are transient and can be managed symptomatically. This clinical case illustrates the promising value of epoprostenol for the treatment of severe digital vasculopathy in SSc patients, particularly in those with concomitant PAH.

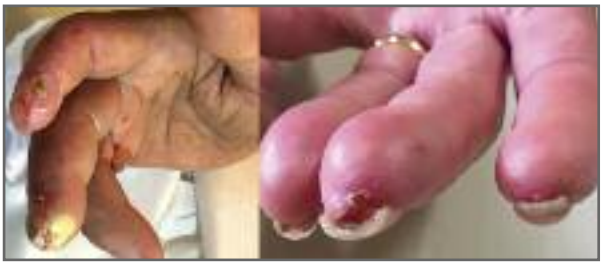

FIGURE. Digital ulcers before and after epoprostenol

CC82 – A IMPORTÂNCIA DA HISTOLOGIA NA SARCOIDOSE: A PROPÓSITO DE UM CASO ATÍPICO

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Introdução: A sarcoidose é uma doença inflamatória sistémica, caracterizada pela presença de granulomas não caseosos. Tipicamente manifesta-se na terceira e quarta décadas de vida. O seu diagnóstico assenta em aspetos clínicos, radiológicos e histológicos e na exclusão de outras condições incluindo infeciosas, neoplásicas e ambientais.

Descrição caso clínico: Homem, de 68 anos, operador de fundição de alumínio, com antecedentes de diabetes *mellitus* tipo 2, hipertensão arterial, doença renal crónica, litíase renal e doença pulmonar intersticial não especificada, foi internado no serviço de Reumatologia por quadro de febre e artralgias de ritmo inflamatório com 10 dias de evolução, com envolvimento aditivo dos joelhos direito e esquerdo e noção de tumefação articular. Referia história prévia de fasceíte plantar submetida a infiltração local há vários anos, sem novos episódios de talalgias. Desde há cerca de 3 meses, com dispneia para médios esforços e perda ponderal significativa, em estudo por Pneumologia. Nesse seguimento, realizou tomografia computorizada torácica com achados de várias adenopatias mediastínicas e espessamento difuso de aspeto reticulado do interstício peribroncovascular, interpretados em provável contexto de pneumonite de hipersensibilidade. Referia ainda lesões eritematosas pruriginosas nas superfícies extensoras dos membros inferiores e tronco, com anos de evolução e agravamento recente. Objetivamente, encontrava-se subfebril, com gonartrite bilateral e lesões cutâneas eritematosas periarticulares. Analiticamente, com hemoglobina 12,2g/dL, neutrófilos 9,41x10^9/L, proteína C-reativa 179mg/L, velocidade de sedimentação 32mm/1ªh, ácido úrico 5,9 mg/dL, cálcio ionizado 2,82mEq/L, enzima conversão angiotensina (ECA) 69U/L, vitamina D 10ng/ml, paratormona 9,8pg/ml e ureia/creatinina 114/3,00mg/dL. O líquido articular apresentava características inflamatórias, com pesqui-

sa de cristais e exames culturais negativos. Na urina de 24horas, uma hiperuricosúria, com quantificação de cálcio, fósforo e creatinina normais. As hemoculturas e urocultura foram estéreis. Durante o internamento, aditivamente desenvolveu artrite da tibiotársica direita. De salientar na avaliação radiográfica a evidência de entesófito calcaneano bilateral, sem achados de lesões líticas ou erosões. Foi medicado com prednisolona 15mg por dia, com boa resposta analítica e clínica a nível articular e cutâneo. Prosseguiu-se o estudo complementar com broncofibroscopia que não revelou alterações morfológicas ou topográficas. O lavado broncoalveolar apresentava uma contagem celular diferencial com linfocitose intensa e predomínio de CD8+, com uma razão CD4/CD8 de 0.10. As provas funcionais respiratórias foram normais. Apesar dos resultados dos exames efetuados, realizou ainda criobiópsia transbrônquica pulmonar cujo estudo anatomopatológico revelou processo inflamatório crónico granulomatoso muito sugestivo de sarcoidose. A pesquisa de microorganismos por métodos histoquímicos e a citologia para células malignas foram negativas.

Discussão: O presente caso realça a importância do estudo histológico para o diagnóstico de sarcoidose, sobretudo perante uma idade de apresentação tardia, com valores de ECA normais e pela coexistência de exposição profissional a metais e de várias comorbilidades que por vezes desafiam a interpretação correta do quadro clínico.

CC96 – POEMS SYNDROME: 14 YEARS WITHOUT A DIAGNOSIS

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Background: Polyneuropathy, organomegaly, endocrinopathy, M protein, and skin changes (POEMS) syndrome, also known as Crow–Fukase syndrome, osteosclerotic myeloma and Takatsuki syndrome, is a rare paraneoplastic syndrome. The other importante features include papilledema, extravascular volume overload, sclerotic bone lesions, thrombocytosis, elevated vascular endotelial growth factor (VEGF) and abnormal pulmonary function. The diagnosis is based on having both the polyradiculoneuropathy and the monoclonal plasma cell disorder (almost always lambda), at least 1 of the other 3 major criteria (Castleman disease, sclerotic bone lesions or elevated VEGF) and at least one minor criteria.

Case report: A 63-year-old woman with personal background of asthma, hypothyroidism, arterial hypertension and dyslipidemia was admitted to the Rheumatology Department. She complained of polyarthralgias with no specified rhythm for 14 years, having subsequently developed fatigue, myalgias associated with distal paresthesias and muscle weakness of the upper and lower limbs with increasing difficulty walking. She referred for the last 6 years a progressive increase in abdominal volume and inguinal masses. The patient was hospitalized for revision of the clinical case and diagnostic clarification. Physical examination revealed progressive paraesthesias, skin hyperpigmentation, hemangiomas, acrocyanosis, multiple peripheral lymph nodes and a large splenomegaly. Routine blood examination revealed thrombocytosis (739 platelets/μl over 4 years), increased serum creatinine (1.50 mg/dL) and B2-microglobulin (4.56 mg/L) and normal C-reactive protein and erythrocyte sedimentation rate. Hormonal study showed a primary hypothyroidism and hyperprolactinemia. Serum protein electrophoresis revealed abnormal monoclonal immunoglobulin G-lambda (IgG-) paraprotein for 5 years. She had done multiple different imagiologic exams which revealed blastic and litic lesions (at the level of the skull, sternum, dorsal and lumbar spine, sacrum, iliac wings, femurs and humerus). She had already been submitted to six myelograms and bone marrow biopsies, all revealing plasmacytosis of undetermined significance. Guided biopsy to a subtrocanteric lesion done 5 years before revealed plasma cells aggregates. Computerized tomography (CT) scans showed splenomegaly and lymphadenopathies (including the Waldeyer ring, axillary and inguinal lymph nodes) for the last 6 years. Needle electromyography confirmed a polyneuropathy and measurement of VEGF level was normal. Once a presumptive diagnosis of POEMS was established, the patient was oriented to a reference center for appropriate treatment.

Conclusions: Our patient had almost all the features of POEMS syndrome. Surprisingly she had a normal VEGF which is uncommon. POEMS syndrome is a challenging diagnosis due to its low incidence, the diversity of affected organs and systems, and the variability of its clinical manifestations. In this case the dia-

gnosis was delayed 14 years. The disease has a chronic course and a better prognossis than multiple mieloma with the patients typically surviving three times longer.

CC95 – MULTIPLE MUSCULOSKELETAL MANIFESTATIONS IN POST RENAL TRANSPLANT HYPERPARATHYROIDISM

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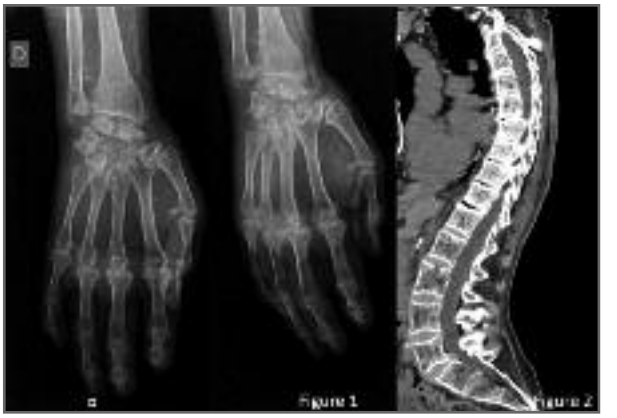

FIGURE. Radiographic characteristic features

Background: Persistent hyperparathyroidism occurs in approximately 15-50% of patients following renal transplantation. It is thought to be due to chronic structural changes of the parathyroids, such as hyperplasia and adenoma formation, despite removal of the initial stimuli for hyperparathyroidism. Therefore, renal transplant recipients are vulnerable to disorders of mineral and bone metabolism associated with chronic kidney disease (CKD) – renal osteodystrophy (ROD). Furthermore, chondrocalcinosis is more common in primary hyperparathyroidism, but is also seen in CKD as part of calcium pyrophosphate dehydrate deposition (CPPD).
Case report: A 60-year-old female patient was referred to the Rheumatology clinic following evaluation at a Nephrology inpatient clinic due to fever, polyarthralgias and edema at right metacarpophalangeal joints, wrist and elbow with associated increasing laboratory parameters of inflammation (C-reactive protein 25 mg/dL). During a more careful anamnesis she mentioned incapacitating polyarticular pain of mechanical rhythm in the last 6 years. She had been diagnosed with Alport syndrome, undergoing hemodialysis between 1979 and 2007, before receiving a renal transplantation. During her stay at out Rheumatology Department, laboratory testing revealed high serum calcium (10,8 mg/dL) and parathyroid hormone (131,0 pg/mL) which suggested secondary hyperparathyroidism, already treated with cinacalcet every other day and cholecalciferol 2668 UI/day. Radiographic studies showed multiple characteristic features: osteopaenia; subperiosteal resorption of phalanges (figure 1); Rugger-Jersey spine - sclerosis of the vertebral body end plates and milimetric hypodense lesions scattered throughout all segments of the rachis in computed tomography (figure 2); osteosclerosis and multiple lytic lesions and subchondral cysts. In addition, chondrocalcinosis, cartilaginous, periarticular and arterial calcifications were documented in multiple locations. The patient was not proposed for bone biopsy to establish a specific diagnosis due to several serious comorbidities. Pain therapy was adjusted and the patient kept on regular follow-up in Rheumatology and kidney transplant consultations.
Conclusions: Renal transplantation corrects most of the metabolic abnormalities that cause ROD. Nevertheless, various musculoskeletal manifestations persist in many transplant recipients, remaining a challenging diagnosis requiring a multidisciplinary approach.

CC185 – MULTIDISCIPLINARY APPROACH OF DACTYLITIS: A DIAGNOSTIC SURPRISE!

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Introduction: Dactylitis is considered a hallmark feature of psoriatic arthritis, but it is found in other spondy-

loarthropathies, especially reactive arthritis, and other conditions (e.g., sarcoidosis, gout, sickle cell disease, and a variety of infections). Therefore in an patient presenting with a sausage-shaped swelling of the digits a careful history taking, physical examination, and appropriate complementary diagnostic tests are needed to find the cause. The present paper discuss the importance of a multidisciplinary approach to dactylitis.

Case Report: The present paper describes a case of a 55-year-old woman, cleaning maid, non-smoker, who is referred to Orthopaedics appointment for swelling of the second and fourth finger of the right hand. She also complains of changes in the nail of the first toe of the left foot for the last two years and in the last 6 months, the nail has been destroyed by cracking and a soft pink nodule appear underneath the nail. A Dermatology appointment has scheduled. A biopsy of the nail bed of the first toe was done. In the histology, sarcoid granulomas, without necrosis of caseification, were observed in the deep reticular dermis associated with a discrete lymphocytic infiltrate. No microorganisms were observed. These findings are suggestive of sarcoidosis. A Rheumatology referral was promptly maid. Besides the second and fourth finger swelling and the toe lesion the patient reported pain in the left shoulder consistent with rotator cuff pathology and mucous sputum, but denied other respiratory complaints. With no other systemic complaints. She had controlled high blood pressure with perindopril and amlodipine and an unremarkable family history. Physical examination was unremarkable, besides the dactylitis and the shoulder injury.

Blood work show slight elevation of the serum angiotensin-converting enzyme, without any other changes. Chest x-ray show enlargement of the mediastinum. High resolution thoracic CT was performed and mediastinal and bilateral hilar adenopathies were confirmed. Spirometry was within normal values. Therefore she also had asymptomatic pulmonary type I sarcoidosis.

She was started on prednisone 20 mg/day and after one month of treatment, swelling of the digits was much better but longer follow-up of the patient is required to assess the efficacy of the treatment.

Discussion: Dactylitis is a rare complication of sarcoidosis, been reported to occur in 0.2% of all patients with sarcoidosis. Generally occur in chronic disease and is an unusual features of the disease at presentation.

Most patients with dactylitis have active systemic sarcoidosis with involvement of several organs, and is more common in younger individuals.

This case is an atypical presentation of sarcoidosis and draws attention to the importance of multidisciplinary collaboration in the approach to dactylites

CC210 - PREMENOPAUSAL OSTEOPOROSIS: AN UNUSUAL ETIOLOGY

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Introduction: Multiple fractures in young adult patients are very rare without previous trauma. It should lead to investigate a secondary cause of osteoporosis. We report the case of a young female athlete referred for Rheumatology consultation after the third fracture.

Clinical case: We describe a thirty six-year-old woman, physical education teacher and high competition athlete, referred to a Rheumatology appointment due to multiple stress fractures. Patient reports a fracture of the left tibia, the left femur and the sacrum. After careful history taking she described low back pain, without any rhythm or morning stiffness and fatigue. She denied any other complaints and have no relevant personal history. She had had a healthy baby girl two years ago. The contraceptive method chosen after birth, was an intrauterine device with progestin, and is in amenorrhea ever since.

Physical examination revealed no change besides pain on palpation of the sacrum, which had had a recent fracture.

An extensive investigation and exclusion of causes for osteoporosis in premenopausal women was made and no diagnostic conclusion was achieved. At this stage we decided to research further causes of osteoporosis taking into account the socio-professional background of the patient. This patient is a marathoner and female athletes of high competition may suffer from female athlete triad, an unusual etiology of premenopausal osteoporosis.

Discussion: The female athlete triad as first described in 1992 by the American College of Sports Medicine. It consisted of eating disorder, amenorrhea, and osteoporosis; the definition was updated in 2007 to include a spectrum of dysfunction related to energy availabili-

ty, menstrual function, and changes in bone mineral density.
Our patient fits this definition: she has menstrual changes and stress fractures. Also this triad is more common in athletes involved in sports that lead to low weight, as endurance running, because low energy availability, from either dietary restriction or increased expenditure, plays a pivotal role in development of the triad. Treatment is centered on restoring energy availability to reverse adverse metabolic changes.

CC113 – THE IMPORTANCE OF REPEATED ULTRASOUND-GUIDED SYNOVIAL BIOPSIES AND HISTOLOGICAL ANALYSIS IN A CASE OF SEPTIC/PSORIATIC ARTHRITIS

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Introduction: Synovial histological analysis plays an important role in the differential diagnosis of synovitis, namely when considering a septic aetiology. Ultrasound-guided needle synovial biopsy (USNB) has recently emerged as a minimally invasive technique allowing for collection of high quality synovial tissue with very good patient tolerance. We aim to describe a case where repeated USNB and synovial pathology were crucial in assisting clinical decisions.
Clinical case: A 37 year-old man with a history of guttate psoriasis since the age of 16 and treated with etanercept for 10 years was admitted to the Dermatology department with severe cellulitis of the left hand and wrist. In the last three years he had been experiencing intermittent inflammatory lumbar pain and more recently he developed inflammatory cervical, buttock and left wrist pain, suggestive of psoriatic arthritis. Empiric intravenous (IV) antibiotic (AB) therapy was started with piperacillin-tazobactam, without significant clinical or laboratory improvement after 10 days. Observation was remarkable for pain, swelling, warmth and marked functional limitation of the left wrist with confirmed moderately active synovitis on ultrasound (US) (Fig 1A). Joint aspiration revealed turbid synovial fluid, with decreased viscosity and glucose levels and increased protein content. The direct and cultural bacterial exams were negative and given the high suspicion of septic arthritis an USNB was performed. Microbiological exams were negative and histological analysis showed moderate synovitis with numerous neutrophils suggesting septic aetiology (Fig 1B). Due to clinical worsening and onset of fever vancomycin was added to cover methicillin-resistant Staphylococcus aureus Both AB were suspended after 48h due to a severe hypersensitivity skin reaction and a therapeutic window was then started. Five days after the first biopsy, having clinical and US worsening of the arthritis (Fig 1C), a second USNB of the left wrist was done, which was negative for microbial agents and revealed aggravated synovitis with abundant neutrophil infiltrate and fibrin exudate (Fig 1D). Linezolid IV was started with mild clinical and significant laboratory improvement (C-reactive protein [CRP] decrease from 6.4 to 0.8mg/dL) and switched to oral route after 14 days. On day 20 of linezolid, there was clinical worsening of arthritis, paralleled by an increase in CRP (3.9mg/dL) and worsening of US synovitis (Fig 1E). Due to the possibility of a mycobacterial infection, a third USNB was performed. Polymerase chain reaction for Mycobacterium tuberculosis was negative, as was the direct exam (Ziehl-Neelsen). Histological analysis showed a marked improvement of the synovitis, fitting with a psoriatic arthritis pattern (Fig 1F). Considering the patient had been off etanercept for over 3 months, persisting synovitis was considered to be related to disease activity and the wrist joint was injected with hexacetonide triamcinolone 40mg twice, over the course of two weeks, with significant clinical and US improvement (Fig 1G). The patient was later proposed to switch biological therapy to golimumab to control both joint and skin disease.
Conclusions: In this case, USNB was confirmed as an effective tool that allowed safe collection of synovial tissue of the same joint for three times in a period of five weeks. Pathological analysis was crucial in guiding treatment decisions, by differentiating active septic arthritis from low-grade inflammatory synovitis in the presence of a similar clinical, laboratorial and US picture.

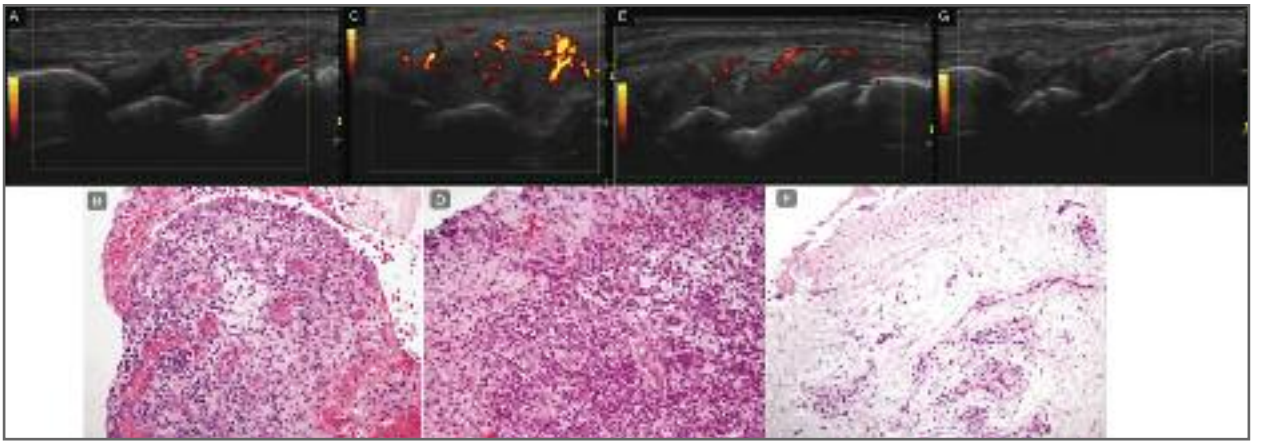

FIGURE. A) Ultrasound of the left wrist showing grade 2 synovial thickening (ST) synovitis with grade 2 power Doppler (PD) signal of the radiocarpal and intercarpal joints. **B)** (H&E, 200x) First synovial biopsy showing moderate synoviocyte hyperplasia/hypertrophy, moderate sublining inflammatory infiltrate of lymphocytes, macrophages and numerous neutrophils and rare perivascular lymphocyte aggregates, with no crystals, microorganisms or granulomas. **C)** Ultrasound of the left wrist at the day of the second biopsy showing grade 3 ST synovitis with grade 2 PD of the radiocarpal and intercarpal joints. **D)** (H&E, 200x) Second synovial biopsy consistent with septic arthritis, showing marked subliming neutrophilic infiltrate and intense vascular proliferation/congestion with no crystals, microorganisms or granulomas. **E)** Ultrasound of the left wrist at the day of the third biopsy showing grade 3 ST synovitis with grade 2 PD of the radiocarpal and intercarpal joints. **F)** (H&E, 200x) Significant improvement of chronic synovitis, with oedema, fibrin exudate and mild perivascular lymphocytic infiltrate, without lymphoid aggregates, neutrophils or granulomas. **G)** Marked improvement of synovitis in the left wrist after two corticosteroid joint injections, with grade 2 ST synovitis in the radiocarpal and intercarpal joints, without PD signal.