Onset of rheumatoid arthritis in a patient with ankylosing spondylitis

Reis E, Carvalho J

Dear Sir,

Overlapping syndromes are described in the scientific literature and comprises the linkage of at least two different rheumatic diseases which each one. The most common overlapping of rheumatic diseases is between rheumatoid arthritis and Sjögren’s syndrome. However, several other clinical associations have been described in the medical literature. Few previous articles describe the rare association of rheumatoid arthritis and ankylosing spondylitis, comprising until 2011 about 19 cases of this rare association 1-13. Herein, the authors report one additional case of the rare association of a patient rheumatoid arthritis and ankylosing spondylitis.

A 63-year-old man started in 1983 with low back pain with inflammatory characteristics and morning stiffness with long duration. He has also arthralgia on his right ankle and right Aquilian enthesisitis. His physical examination demonstrated reduction of thoracic expansion, flexion and lateralization of his column. Modified Schober test was 5 cm and pain on his sacroiliac joints. X-ray confirmed bilateral sacroiliitis (Figure 1) and thoracic–lumbar spine x-rays showed syndesmophytes (Figure 2). Erythrocyte sedimentation rate (ESR) was 70 mm/1st hour and C-reactive protein (CRP) of 48 mg/L. HLA-B27 was positive. A diagnosis of ankylosing spondylitis was performed and he was treated with indomethacin 50 mg twice a day and he experienced good clinical response. After 10 years, he started bilateral exuberant synovitis of wrists, symmetrical involvement of proximal interphalangeal joints, arthritis of knees and ankles. At that moment, ESR was 54 mm, CRP 48 mg/L. Rheumatoid factor was positive using latex agglutination and a positive anti-CCP 31.5 IU was detected. X-ray demonstrated destructive erosions and lesions on his wrists (Figure 3). A diagnosis of rheumatoid arthritis was done. A chronic renal failure was also diagnosed (creatinine 2.1 mg/dL and renal ultrasound revealed chronic nephropathy and cortical atrophy) with chronic disease anemia (hemoglobin 9.8 g/L). Deflazacort 15 mg/day was then initiated associated with sulphasalazine 1 g/day (when 2 g/day was used liver enzymes increased) and methotrexate 20 mg/week subcutaneously. He was referred to nephrology Department and erythropoietin, furosemide and allopurinol were started and dialysis was indicated. Due to the bad clinical control, adalimumab (40 mg SC each every two weeks) was then started. After 3 months, he had herpes zoster and adalimumab was stopped and he was treated with intravenous acyclovir. After zoster treatment, infliximab 5 mg/kg at 0, 2, 4 and then each 8 weeks was then initiated. Currently, he has moderate activity of rheumatoid arthritis (DAS28 4.88), ESR 52 mm/1st hour and hemoglobin 12.8 g/L, and no lumbar pain.

Our patient fulfilled the modified New York criteria for AS diagnosis 14, he had the presence of grade 4 of sacroiliac joints.

1 Rheumatology Division, Hospital Humanitas, Varginha, Minas Gerais, Brazil
2 Rheumatology Division, Hospital Universitário Prof. Edgard Santos, Federal University of Bahia, School of Medicine Salvador, Bahia, Brazil

FIGURE 1. Sacroiliac x-ray confirming complete fusion of sacroiliac joints
croliitis. He also evolved after 10 years with polyarthritis, exuberant synovitis, positivity for anti-CCP and rheumatoid factor fulfilling the ACR criteria for RA\textsuperscript{15}.

The previous study from Sattar et al. described a patient with a rare overlap of rheumatoid arthritis, ankylosing spondylitis and dermatomyositis besides of diabetes melittus. Importantly, this patient had RA and evolved with AS\textsuperscript{5}. One other report that describes a patient who had RA and subsequently developed AS\textsuperscript{6}. Scherak et al. in 1979 reported a case with simultaneous RA and AS and reviewed the literature since 1975 which described 13 cases of this unique association\textsuperscript{4}. Another interesting combination was reported by Lecoules et al. of a 63-year-old man with RA with Felty’s disease that evolved with AS\textsuperscript{2}. In an original study, 184 patients with AS and/or reactive arthritis were examined for the presence of RA. Interestingly, the authors found three subjects with concomitant RA and AS, all of them were men, and it gave a frequency of 2.7% in that study\textsuperscript{3}. There are some demographic characteristic that distinguish RA from AS, including female predominance in the former and the coexistence of the two conditions was estimated in 0.0002 to 0.0005%\textsuperscript{1}. Then it is expected about 360-900 cases in Brazil of this rare association (population of 180 million).

ACKNOWLEDGEMENTS
Carvalho JF received grants from the Federico Foundation and CNPq (300665/2009-1)

CORRESPONDENCE TO
Jozelio Freire de Carvalho
Rua das Violetas, 42, AP. 502, Pituba
41810-080 Salvador-Bahia, Brazil
E-mail: jotafc@gmail.com

REFERENCES


