

OLANZAPINE TREATMENT IMPROVES QUALITY OF LIFE IN A PATIENT WITH FIBROMYALGIA SYNDROME: A PSYCHOLOGICAL EVALUATION

Corallo F[†], Italiano D[†], Bonanno L*, Baglieri A*, Marino S*, Bramanti P*

Dear Editor,

Fibromyalgia Syndrome (FMS) is a disabling condition characterized by widespread chronic muscular pain, fatigue and a range of functional disorders, affecting 0.1% to 3.0% of the general population. The etiology of FMS remain uncertain, involving somatic, psychological and social factors¹. Currently, no treatment has been demonstrated to be fully effective on all FMS symptoms, nor any consensus on how to manage the condition has been reached. Treatment recommendations propose palliating symptoms, along with a multimodal approach^{1,3}. Anecdotal evidences and few studies support the efficacy of olanzapine (OLZ) in treating FMS⁴⁻⁶. Nevertheless, benefits of OLZ on the quality of life have not been investigated exhaustively.

We herein report a 56-years-old married white female presenting with diffuse musculoskeletal pain, morning stiffness, headache and chronic fatigue for 2 years. Comorbidity for anxiety, depression and dysphoric mood was also reported.

The diagnosis of FMS was based, according the American College of Rheumatology criteria^{1,2}, on the presence of chronic (>3 months) pain in all four quadrants of the body and tenderness in at least 11 of 18 tender-points at pre-defined locations.

At the time of the initial evaluation, she was taking amitriptyline 50 mg/day at bedtime and prazepam 30 mg/day. Abuse of various non-steroidal anti-inflammatory drugs was also reported. Due to unsatisfactory response, treatment with amitriptyline was substituted by duloxetine 60 mg/day, obtaining only partial efficacy in mood disorders but no significant improvement in pain. Add-on pregabalin 150 mg/day did not significantly improved her disturbances. Therefore, OLZ was introduced at 2,5 mg/day at bedtime. Further dosage

increments were not needed. Indeed within a few weeks patient referred an improvement of her daily aching pain symptoms and an increased sense of well-being.

After three months OLZ-treatment, patient only presented slight muscular pain, so she strongly reduced the use of non-steroidal anti-inflammatory drugs, and she was able to discontinue pregabalin and to reduce prazepam to 20 mg/day. Patient is now on duloxetine 60 mg/day, OLZ 2,5 mg/day and prazepam 20 mg/day, without any significant side-effect. The Fibromyalgia Impact Questionnaire, the Short-Form Health Survey and the Coping Orientation to the Problems Experienced, were administered to assess the disease impact on daily activities and quality of life before OLZ introduction and at the three months follow-up⁷⁻⁹. Results are summarized in the figure (Figure 1)

The only study evaluating OLZ influence on pain and quality of life used uniquely the Brief Pain Inventory to explore patient's pain and functioning⁴. Another study on a series of 25 FMS patients focused on OLZ effectiveness without exploring patients' quality of life⁵. To our knowledge the current article is the first including a FMS symptom-specific tool and a psychological evaluation to assess how OLZ treatment influences the quality of life in a FMS patient.

Antagonism for 5HT-2 and 5HT-3 receptors was proposed as a possible mechanism of action for OLZ-induced pain relief^{4,6}. As OLZ plasma levels are not modified by add-on duloxetine, we can reasonably exclude that pharmacokinetic interactions between duloxetine and OLZ could account for the clinical and psychological improvement in this subject¹⁰.

Our case provides further evidence that OLZ can be a valuable therapeutic option in patients with FMS. Notably, just a very low OLZ dosage (2,5 mg/day) was able to provide substantial benefits to the patient, fact that is relevant because tolerabili-

*IRCCS Centro Neurolesi "Bonino-Pulejo" Messina, Italy

†These authors equally contributed to this work.

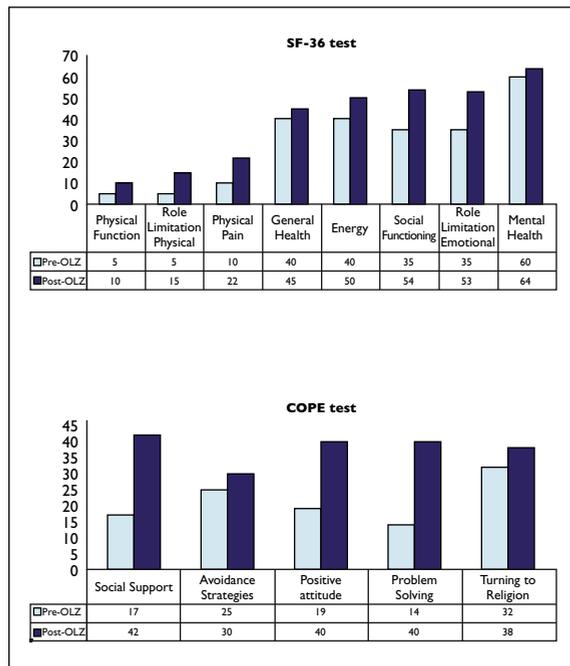


Figure 1. Tests scores before and after OLZ treatment. SF-36, Short Form Health Survey; COPE, Coping Orientation to the Problems Experienced; OLZ, Olanzapine; FIQ, Fibromyalgia Impact Questionnaire.

ty appeared as the main limit to OLZ use in this pathology⁵. Therefore, association therapy of OLZ and other pain-effective medication could be considered as a feasible therapeutic choice for the management of pain and emotional symptoms in FMS patients. Obviously, these findings need to be explored in controlled studies on a larger number of patients.

Correspondence to

Domenico Italiano, MD
IRCCS Centro Neurolesi "Bonino-Pulejo"
Tel. 09060128954
E-mail: domenicoitaliano@hotmail.com

References

1. Clauw DJ. Fibromyalgia: an overview. *Am J Med* 2009; 122:S3-S13.
2. Wolfe F, Smythe HA, Yunus MB, et al. The American College of Rheumatology 1990 Criteria for the Classification of Fibromyalgia. Report of the Multicenter Criteria Committee. *Arthritis Rheum* 1990; 33:160-172.
3. Mease PJ. Fibromyalgia: key clinical domains, comorbidities, assessment and treatment. *CNS Spectr* 2009; 14:6-9.
4. Freedenfeld RN, Murray M, Fuchs PN, Kiser RS. Decreased pain and improved quality of life in fibromyalgia patients treated with olanzapine, an atypical neuroleptic. *Pain Pract* 2006; 6:112-118.
5. Rico-Villademoros F, Hidalgo J, Dominguez I, García-Leiva JM, Calandre EP. Atypical antipsychotics in the treatment of fibromyalgia: a case series with olanzapine. *Prog Neuropsychopharmacol Biol Psychiatry* 2005; 29:161-164.
6. Kiser RS, Cohen HM, Freedenfeld RN, Jewell C, Fuchs PN. Olanzapine for the treatment of fibromyalgia symptoms. *J Pain Symptom Manage* 2001; 22:704-708.
7. Pagano T, Matsutani LA, Ferreira EA, Marques AP, Pereira CA. Assessment of anxiety and quality of life in fibromyalgia patients. *Sao Paulo Med J* 2004; 122:252-258.
8. Assumpção A, Pagano T, Matsutani LA, Ferreira EA, Pereira CA, Marques AP. Quality of life and discriminating power of two questionnaires in fibromyalgia patients: Fibromyalgia Impact Questionnaire and Medical Outcomes Study 36-Item Short-Form Health Survey. *Rev Bras Fisioter* 2010; 14:284-289.
9. Boehm A, Eisenberg E, Lampel S. The Contribution of social capital and coping strategies to functioning and quality of life of patients with fibromyalgia. *Clin J Pain* 2010; 27:233-239.
10. Santoro V, D'Arrigo C, Spina E, Micò U, Muscatello MR, Zoccali R. Effect of adjunctive duloxetine on the plasma concentrations of clozapine, olanzapine, and risperidone in patients with psychotic disorders. *J Clin Psychopharmacol* 2010; 30:634-636.