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BACKGROUND

Adult-onset focal dystonia is a motor disorder characterized by involuntary muscle contractions and abnormal postures in a single part of the body. The most common forms are cranial dystonia [blepharospasm (BPS) and dystonia oromandibular], cervical dystonia (CD), dystonia of the upper limb (AD) and laryngeal dystonia (LD). These conditions often cause disability and social embarrassment. Only a limited number of studies have investigated whether the focal dystonia is associated with neuropsychiatric disorders. Several reports have described depression and anxiety in patients with CD and BPS. The presence of obsessive-compulsive disorder (OCD) is a little more controversial.

OBJECTIVE

Aim of this study is the elaboration of a qualitative analysis of major neuropsychiatric disorders in patients with focal dystonia, analyzing what are the cognitive-behavioral disorders more frequent; the change in the quality of life (QoL) following treatment with botulinum toxin; if psychiatric disorders are intrinsic dystonic or reactive to the problem and what are the factors that have the greatest impact on QoL.

MATERIALS AND METHODS

We enrolled 63 consecutive patients referred to our Neurological Clinic; we divided them into two groups: one consisting of 40 patients (23 of whom were suffering from cervical dystonia, 14 from blepharospasm, 3 from craniofacial dystonia and one by writer's cramp) and another, the control group, consisting of 23 patients with facial hemispasm (HFS). Each patient underwent a double evaluation: the first evaluation was done on the same day of treatment with botulinum toxin; the second one, at a distance of one month. In each evaluation, we analyzed the presence and characteristics of the following neuropsychiatric disorders: anxiety, depression, pain and quality of life through the Beck Depression Inventory (BDI-II), the Hamilton Anxiety Rating Scale (HA -A), the Visual Analogic Scale (VAS) of pain and the Short Form - 36 Health Survey (SF-36). Furthermore, 10 patients of the dystonic group have been subjected to the Yale-Brown Obsessive Compulsive Scale (Y-BOCS).

RESULTS

Considering the group of dystonic patients (Fig.1), we observed a high percentage of depressed patients in both pre- (62.5%) and post-treatment (60%) with botulinum toxin; an even higher percentage refers to patients with symptoms of anxiety in both pre- (62.5%) and post-treatment (70%); about half of patients have pain (47.5% in pre and 55% in the post-treatment); as regards the quality of life, low scores (compared with the average values obtained by the Italian population) are obtained, for the index of physical health (ISF: 80% in pre- and 55% in post-treatment) and mental health (ISM: 67.5% in pre- and 62.5% in post-treatment); finally, both in pre- and in post-treatment we have 50% of dystonic patients presenting OCD. In the control group (patients suffering from facial hemispasm, Fig. 2), the percentages present an improvement passing from pre- to post-treatment phase (from 60.8% to 17.3% for depression and from 69.5% to 17.3% for anxiety); 17.3% of patients complained pain in both phases of evaluation; patients with facial hemispasm had lower scores both of ISF and ISM against the national average are respectively 73.9% in pre- and 26.08% in post-treatment.

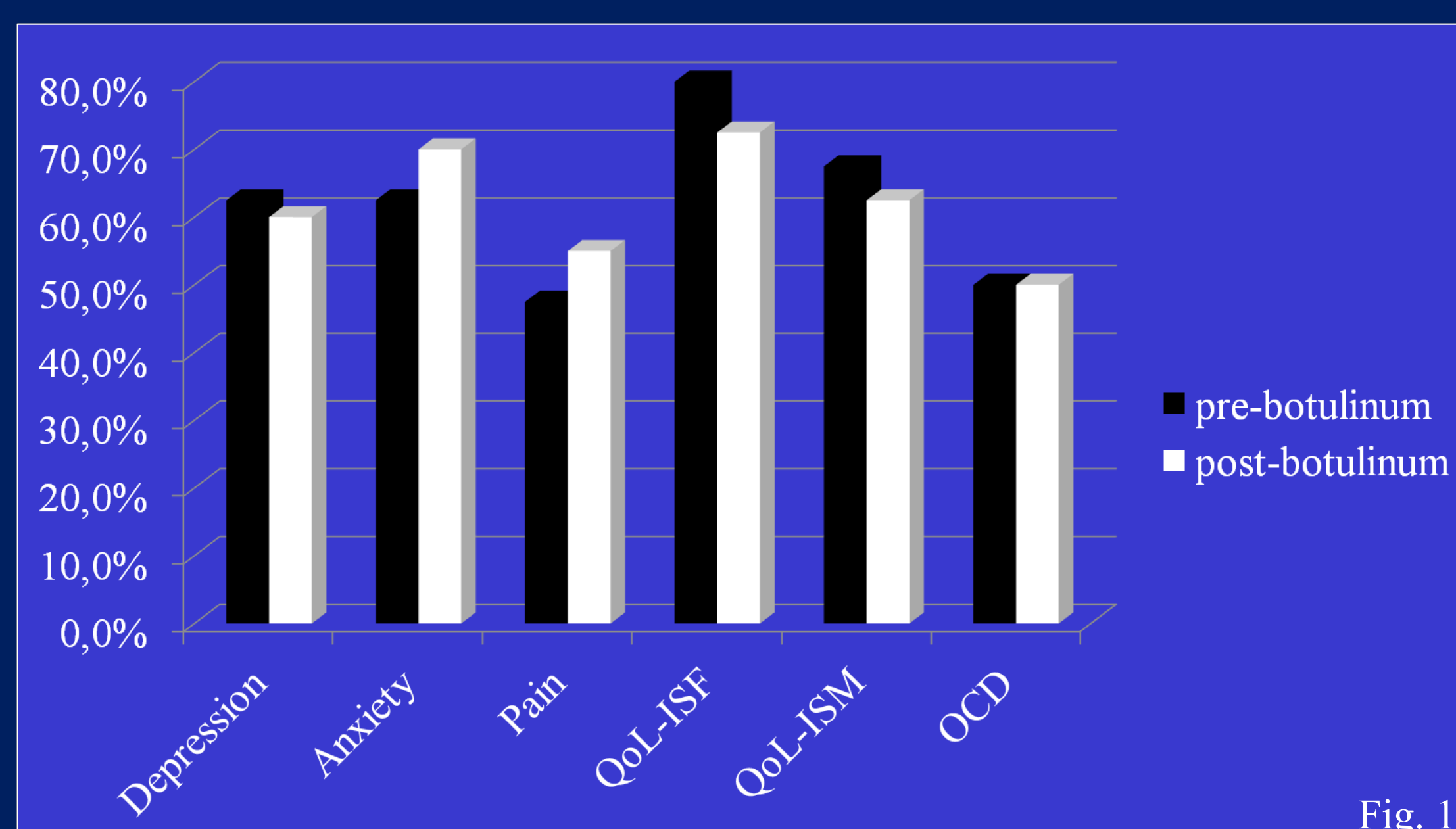


Fig. 1

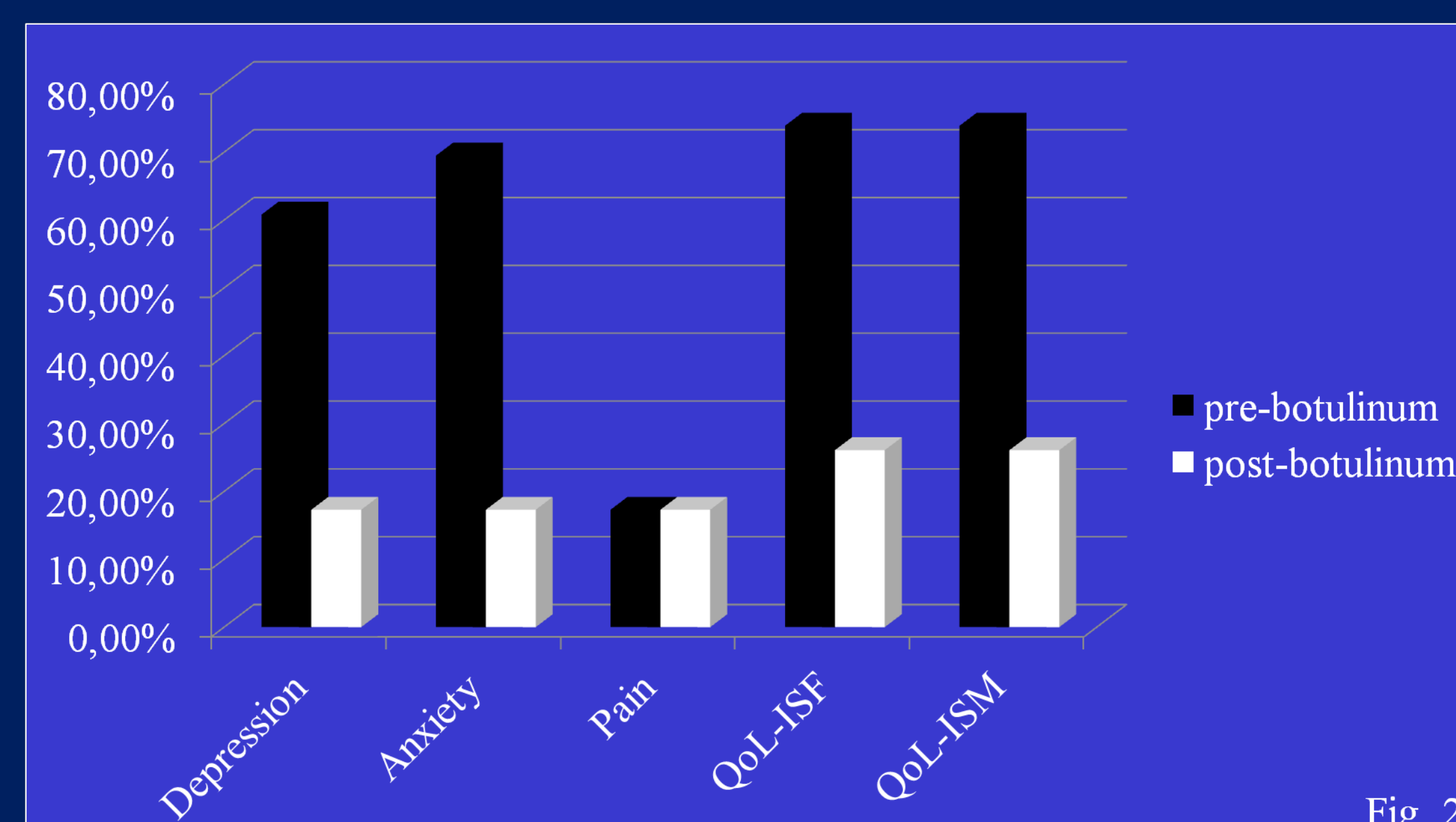


Fig. 2

DISCUSSION

Psychiatric problems in patients with focal dystonia deserve special attention, greater than that which so far has been devoted to them; anxiety disorders seem to play the most important role in the context of the size of psychogenic focal dystonias. It is likely that depression and anxiety can have an inherent nature in dystonic diseases (as opposed to reactive nature of facial hemispasm); treatment with botulinum toxin, just a symptomatic therapy that acts peripherally, does not seem to be able to affect psychiatric problems of dystonic patients (and their consequent perception of QoL); it has appeared that these problems can share with focal dystonias a common neurobiological basis related to a cortico-basal dysfunction.

REFERENCES

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