



# NEUROPSYCHIATRIC ASPECTS OF FOCAL DYSTONIAS

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ANCONA

## 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 27 consecutive patients referred to our Neurological Clinic; we divided them into two groups: one consisting of 19 patients (11 of whom were suffering from cervical dystonia, 6 from blepharospasm, one from craniofacial dystonia and one by writer's cramp) and another, the control group, consisting of 8 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).

## RESULTS

Considering the group of dystonic patients (Fig.1), we observed a high percentage of depressed patients (68.4%) in both pre- and post-treatment with botulinum toxin; an even higher percentage refers to patients with symptoms of anxiety (89.4%) in both pre- and post-treatment; about half of patients have pain (52.6% in pre and 57.8% 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) and mental health (ISM), by the 73.6% of patients dystonic, both during pre and post treatment. In the control group (patients suffering from facial hemispasm, Fig. 2), the percentages present an increasing trend passing from pre to post-treatment phase (from 37.5% to 62.5% for depression and from 50% to 75% for anxiety); 37.5% of patients complained pain in both phases of evaluation; in the pre-treatment, the 62.5% and 50% of patients with facial hemispasm had lower scores of ISF and ISM against the national average (respectively 62.5% and 50% in pre; 75% and 50% in the post -treatment).

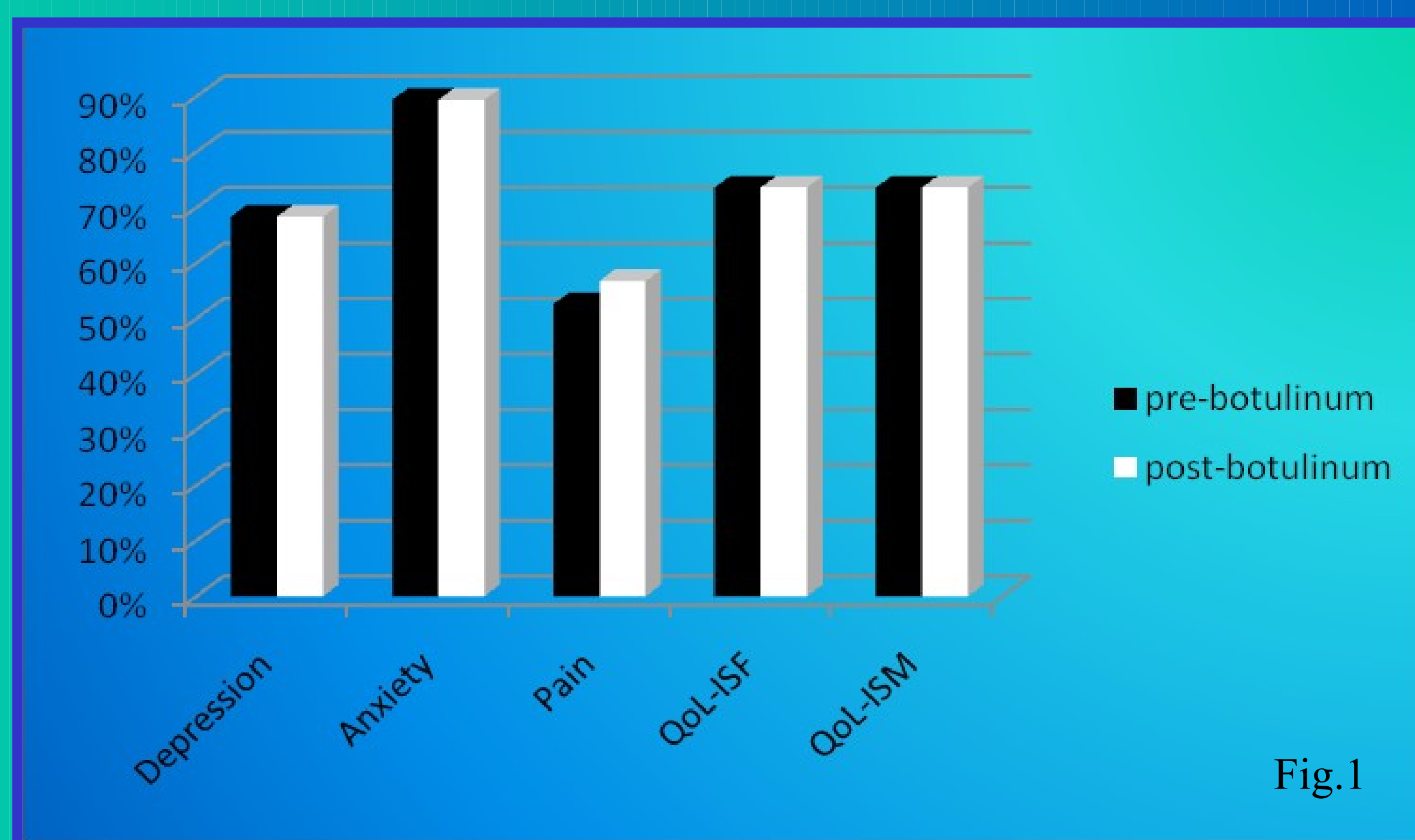


Fig.1

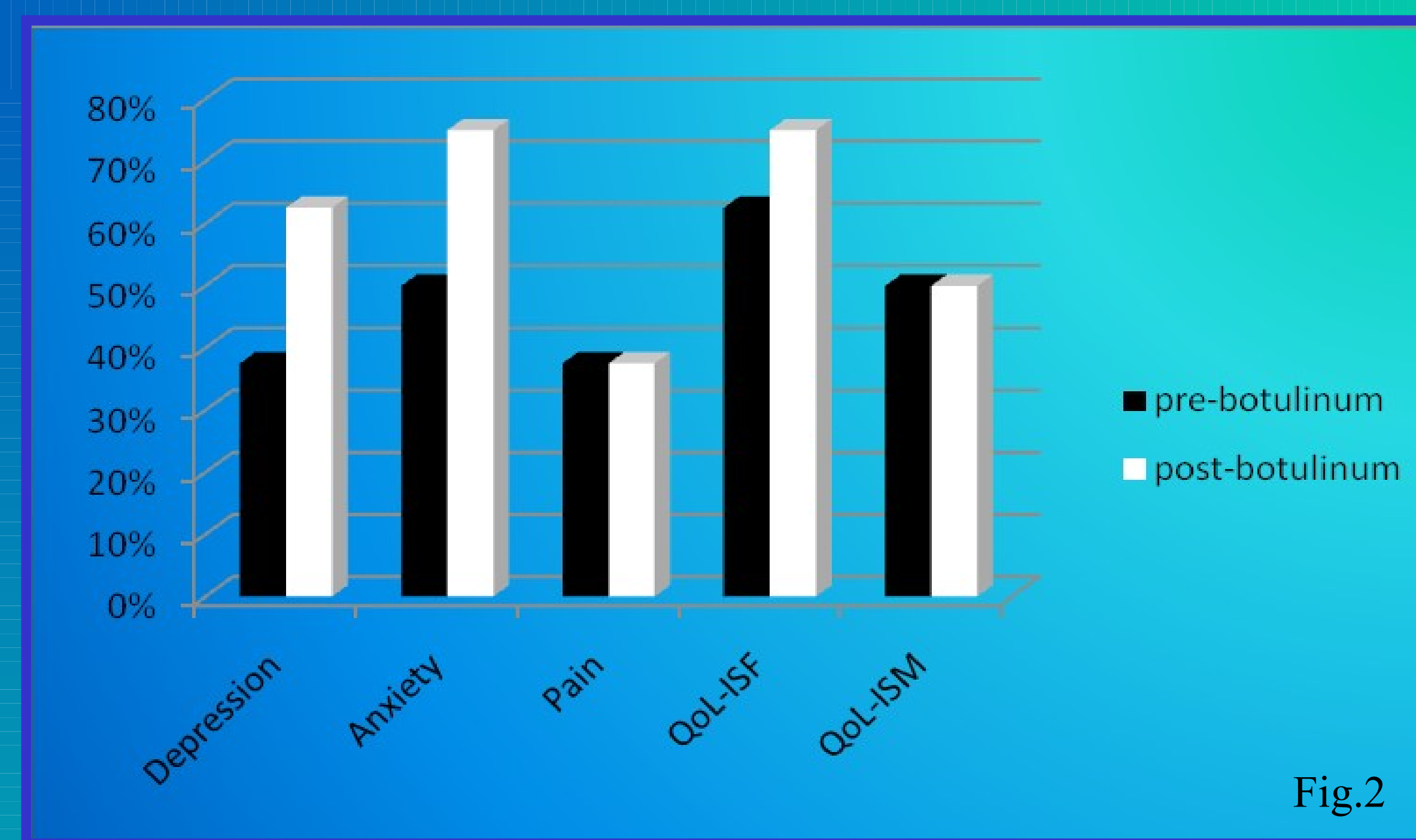


Fig.2

## 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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