Functional cervical dystonia: from the diagnosis to treatment, what we appraised from a clinical history

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Introduction

Functional movement disorders (FMD) are common in neurological practice and they are often difficult to diagnose and manage. We present the case a 25-years-old nun affected by functional cervical dystonia (CD), with abrupt onset and variable dystonic pattern, markedly improved by an intensive physiotherapy program.

Case report

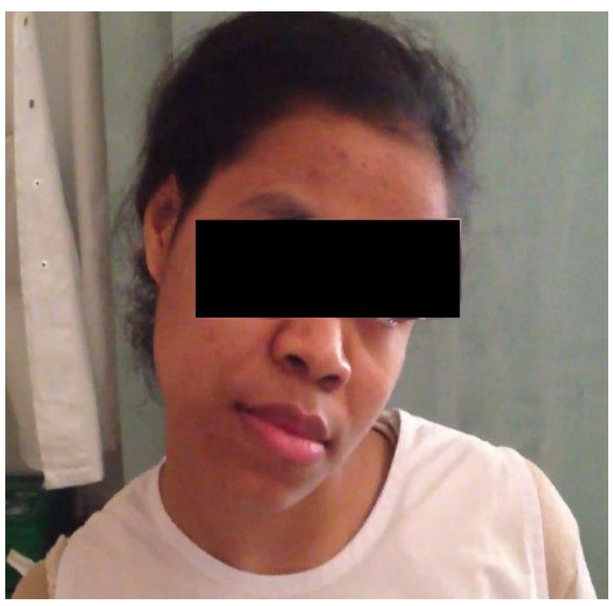
During a religious celebration the patient acutely presented right torticollis, left laterocollis, anterocollis, lateral shift of the head, left shoulder elevation, associated with intense cervical pain. The Toronto Western Spasmodic Torticollis Rating Scale (TWSTRS) at the first clinical evaluation was: Motor 23/33, Disability 9/29, Pain 20/20. Brain MRI, orthopedic and psychiatric evaluations, extensive lab workout showed no relevant alterations.

We proposed a trial with repeated sessions of botulinum toxin A (BoNT-A) intramuscular injections for pain relief and an intensive rehabilitative program of fourteen sessions, consisting of specific exercises focused on relaxing muscles, correcting posture and reinforcing weak muscles.

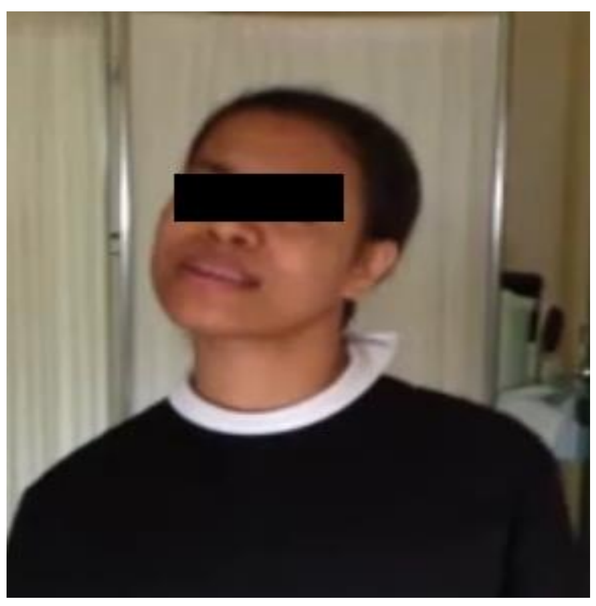
The hypothesis of a FMD was carefully communicated to the nun, avoiding terms like “hysteria”. During the first physiotherapy sessions, dystonic pattern considerably changed to retrocollis and further again to anterocollis. Five weeks later, the TWSTRS score was: Motor 9/33, Disability 3/29, Pain 4/20. A week after the discontinuation of this program the patient presented with resting and action tremor and mild parkinsonism. A DaT-SPECT showed normal findings.

Results

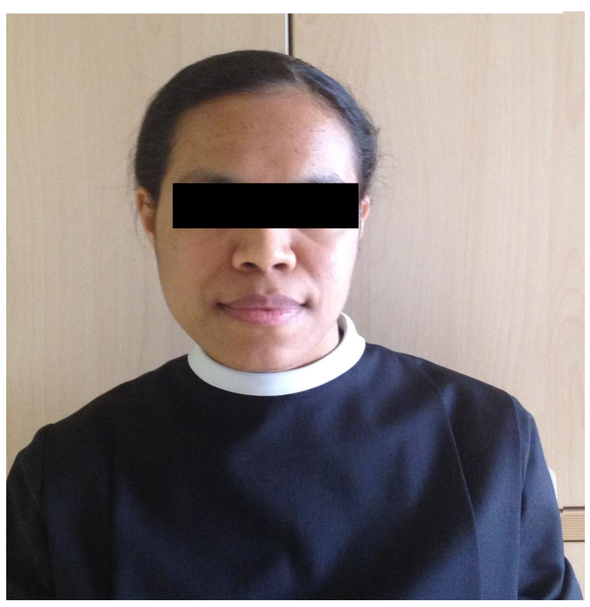
After the restart of physiotherapy, a rapid neurological amelioration was noticed. At follow-up visits only a slight lateral shift of the head remained. The BoNT treatment is still repeated once a year for pain relief (VAS: 4/10).



Before physiotherapy



A week after the start of physiotherapy



At the end of rehabilitative program

Discussion

Functional dystonia represents the second most common presentation of FMD. Abrupt onset with a complex, severe and painful CD are considered “red flags” for the diagnosis of FMD. Moreover, the marked variability of the motor pattern is an additional clue to a FMD. These patients typically present with fixed abnormal postures accompanied by severe pain and most of them are young women. The psychiatric interview in our case showed no psychopathological elements; this supports the current idea that diagnosis of functional disorders should be based on specific and “positive” symptoms and signs. Though there are no treatment guidelines for FMD, prospective studies and randomized control trials showed the efficacy of specific physiotherapy treatment for FMD.

This case confirms that a therapeutic approach consisting of physical therapy of the affected body part with the support of BoNT has a long-lasting effectiveness in FMD, especially in CD.

•*Edwards MJ, Bhatia KP. Functional (psychogenic) movement disorders: merging mind and brain. Lancet Neurol 2012;11:250–260.*
•*Ricciardi L, Edwards MJ. Treatment of functional (psychogenic) movement disorders. Neurotherapeutics. 2014 Jan;11(1):201-7.*