Psychogenic dystonia induced by peripheral trauma. Case report

Distonia psicogênica induzida por trauma periférico. Relato de caso

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Resumo

A origem da distonia continua sendo controversa como nas suas primeiras descrições. A relação de causa e efeito entre traumatismo craniano e distúrbios do movimento está bem estabelecida, no entanto, a existência de tal relação após trauma periférico não é amplamente aceita. Este trabalho tem por objetivo relatar um paciente com postura distônica fixa da mão após trauma periférico.

Palavras-chave: *distonia, trauma periférico, distonia psicogênica.*

Abstract

The origin of dystonia is a point of discussion since its first description. A cause-and-effect relationship between brain injury and subsequent movement disorder is well established, but the existence of such a relationship following peripheral injury has not been universally accepted. This paper has the objective to report a patient with fixed dystonic posture of the hand after peripheral trauma.

Keywords: *dystonia, peripheral trauma, psychogenic dystonia.*

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Introduction

Dystonia is defined as a syndrome of sustained muscle contractions, frequently causing twisting and repetitive movements or abnormal postures [1]. The origin of this abnormal movement is a point of discussion since its first description. Thus, in 1908, Schwalbe [2] published his dissertation "Chronic cramp syndrome with hysterical symptoms". Three years later, however, Oppenheim in disagreement with the psychological origin of this condition emphasized the organic nature of the illness [3]. In this time he coined the word dystonia and employed two different expressions: "Dysbasia Lordotica Progressiva" (to highlight the progressive course) and "Dystonia Musculorum Deformans" (to call attention to the postural deformities) [3]. A cause-and-effect relationship between brain injury and subsequent movement disorder is well established, but the existence of such a relationship following peripheral injury has not been universally accepted, although Gowers in the 1800s had already recognized this association [3,4]. This paper has the objective to report a patient with psychogenic fixed dystonic posture of the hand after peripheral trauma.

Case

A 35-year-old man referred pain and abnormal involuntary movement in the right hand. An ENMG showed carpal tunnel syndrome and then he underwent a decompression surgery. Three months after he developed a dystonic posture of the right hand that waxed and waned with each passing day until it remained fixed. However, the abnormal posture disappeared during sleep. In our first evaluation the neurological examination was normal except for a hyperextend d right hand which was not reversible by counteract maneuvers (Figure). Initial psychological evaluation showed severe affective and professional problems even before the onset of the movement disorder. Levodopa 200 mg/day and baclofen 60 mg/day were ineffective. Unfortunately, the patient did not return for follow-up.

Discussion

Psychogenic movement disorders are estimated to occur in 2 to 3% in all neurological diagnosis although it can be up to 25% in specialized clinics [5,6]. While tremor is the most common (38%), dystonia can be as frequent as 29% [7]. Psychogenic dystonia is difficult to diagnose, since there are no laboratory tests to establish the diagnosis of organic idiopathic dystonia [7].

According to Fahn and Williams [8], clues to the diagnosis of psychogenic dystonia are: (1) sudden onset; (2) spontaneous remissions; (3) paroxysmal occurrence; (4) change of frequency, amplitude and pattern; (5) distractibility; (6) inconsistent and incongruous movements; (7) beginning as a fixed posture; (8) response to placebo, suggestion or psychotherapy. In our patient three of these features support a psychogenic origin. First, the wax and wane course that resembled a paroxysmal disorder. Second, the hyperextended posture of the right hand is an incongruous result of a surgery performed at the carpal tunnel. Third, the evolution to a fixed posture. The presence of severe psychological problems and the nonattendance to subsequent evaluations suggest a psychiatric origin.

In 2001, Jankovic [3] proposed the following criteria for the diagnosis of peripherally induced movement disorders: (1) the trauma is severe enough to cause local symptoms for at least two weeks; (2) the initial manifestation of the movement disorders is anatomically related to the site of injury; (3) the onset of the movement disorders is within days or months (up to

Figure. Patient showing pseudo-dystonic fixed posture of the right hand.

one year) after the injury. Our patient fulfilled only one out of three of Jankovic's criteria. According to the first item, the surgical trauma was not severe enough to precipitate the abnormal movement. On the second item, the dystonic hyperextension posture is not functionally related to the site of injury.

The above criteria and clues allowed us to conclude that our patient had psychogenic dystonia induced by surgical trauma.

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