PSYCHOGENIC DYSTONIA - Case report

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SUMMARY

The concept of psychogenic dystonia refers to an unusual but well-known concept of movement disorders caused by mental disorders. It's self manifested as a permanent muscular contractions that cause twisting, repetitive movements or abnormal posture of the body. It is characterized by high psychiatric comorbidity. 50-year-old patient who has diagnosed segmental dystonia will be presented. He was treated twice at psychiatry department because of comorbid psychiatric disorders. Diagnostic and therapeutic procedures that have confirmed comorbidity and association with clinical signs of neurological disorders were performed.

Key words: Psychogenic dystonia - psychiatric comorbidity - prognosis

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INTRODUCTION

Dystonia is a neurological disorder characterized by involuntary muscle movements. The disorder involves involuntary and sustained muscle contractions that cause twisting and repetitive movements or abnormal posture. Depending on the muscle groups that affect, dystonia may be: a generalized (muscles around the body), segmental (the body parts) or focal (limited to a group of muscles). According to the etiology of origin dystonia can be classified into primary and secondary. In primary or idiopathic dystonia cannot be established organic cause (e.g., lesion or dysfunction of the central and peripheral nervous systems and other environmental structures), and this makes the group psychogenic movement disorders with essential tremor and myoclonus.

Disorders that are of hereditary etiology (AD, AR, XR), or caused by other factors such as complications during birth, or other physical trauma, infection, poisoning, and reactions to medications, especially antipsychotics and others are called secondary dystonia (Goetz 1999). In every day practice, we encounter patients who cannot find an organic cause for their symptoms. According to various sources in the literature, there is about 20-40% of such patients. In relation to neurological somatization, in the midnineties in the UK it is estimated that only a third of patients who visited the neurologist had organic basis for the disturbances. This fact leads us to the psychological and psychosocial reasons as cause for the occurrence of symptoms (Ron 1994). The newly published literature states that only about 3% of patients in specialized neurological clinics have psychogenic caused movement disorders which include dystonia. So it's not surprising that the dystonia was primarily described within the psychological and psychiatric terminology. Psychosocial stressful life events were detected in many patients before the occurrence of the disease (Reich 2006). Patients with psychogenic

dystonia within the psychiatric disorders are classified within the conversion disorder or somatoform similar disorders with many comorbid psychiatric conditions on the axis 1 (Factor et al. 1995). Comorbid disorders are present in high prevalence, together with the symptoms of dystonia (and in the other movement disorders) even 70% of patients with this diagnosis. Often, they are referred to: depression 20%, anxiety disorders 38% (social phobia, agoraphobia, panic disorder) and personality disorders 45%. The highest percentage stand for avoiding personality disorder (Feinstein et al. 2001, Wenzel et al. 1998). Other disorders were found in much smaller percentages (Wenzel et al. 1998)

It was noted that the prevalence of personality disorder, as most often avoiding personality disorder, usually has a symbolic meaning for patients with focal cervical dystonia, where uncontrolled contractions of the neck and back muscles lead to actually 'turning the head from the problems' (William et al. 1998). Comorbid psychiatric disorders most frequently occur before the onset of dystonia, but the development of social phobia in the majority of cases results after, because of visibility and additional disability of the neurological disorder (William et.al. 1998, Lencer et al. 2009).

Influence of comorbidity is primarily important for the prognosis of dystonia symptoms alone, and this is way the psychogenic dystonia is chronic disease with possible improvements in adequately treated comorbid psychiatric diagnoses. Only a small number of patients (10-20%) had satisfactory spontaneous remission, and most patients have disease relapse within 5 years. Women suffer more often from dystonia compared to men (1.5-2 times). In 70-90% of cases the incidence was most pronounced at the age of 40 to 60. 25% of patients with dystonia manifest postural hand tremor. Severe pain is present in 75% of affected individuals who just feel that 'pain' is the symptom which limit them. Abnormal body posture limit patients in certain activities, therefore they are avoiding social contact as it's stated previously (William et al. 1998).

Current pharmacological and nonpharmacological treatment approaches are focus on the basic psychiatric comorbidity, as well as on compliance which is one of the main items for a better prognosis (Thomas et at. 2004)

CASE REPORT

52-year-old man, married with two children, unemployed. He grew up in integral family with alcoholic violent father who mentally and physically abused them (patient, two younger sisters and mother). Early psychomotor development was conducted properly. Earlier he had never been seriously ill. He completed his elementary and high school (construction course). Shortly after, he met his wife and got married because of unplanned pregnancy. He felt caught in this relationship. After the birth of second child marital problems were intensified, when he sought for psychiatrist's help for the first time. He explains that he searched help for his wife and son who have mental problems. From the first visit to a psychiatrist (1988) he was in periodic treatment and psychotherapy of anxiety and depressive symptoms. He tried to leave his wife, but because of the children he dropped out. He is now living in formal marriage. With a series of stressful life circumstances, five years ago his mother (with whom he was very close) also died. This event stands out as crucial in the life, when something 'in him' was changed. After her death the symptoms of panic anxiety and depression were intensified.

All data were obtained from the patient; heteroanamnesis has not been obtained, because the patient did not allow it.

PRESENT ILLNESS

Since 2007 the patient was in neurology treatment for dystonia. Since then involuntary movements of the head and neck began to appear. Difficulties began with retroflexion and rotation of the head to the right, and were accompanied by intense pain in the trapezoid muscle, and painful facial expression with orofacial dyskinesia. These problems prevented him in daily activities and sleep. In December 2007, the neurological examination was conducted diagnosing segmental dystonia. MRI of the cervical spine demonstrated intra vertebral discs protrusion C5-C6 and C6-C7. The patient denied any physical trauma or stressful event prior to the onset of disorder, which could be the trigger for the beginning of the symptoms. From the beginning he was treated with Botulinum toxin but with no significant improvement in symptoms.

After a year of neurological treatment, which proved to be ineffective, the neurologist advised patient on the intensive psychiatric treatment and proposes hospitalization to psychiatry. At the beginning of treatment he denied mental disability and cannot accept a potential cause of dystonia. Since then the patient was treated in hospital on two occasions.

Upon first arrival to the hospital patient said that he is at the edge, not functional and he is not working. Every day feels pain, and so he lives the last 15 months.

The mental status does not recognize the problems of consciousness and orientation, the head is in right retroflexion. He was anxious and in psychomotor tension. Thinking in form and in content has been properly. We observed disturbances in the field of affective sphere (subdepression, reduction in mood and instinctive dynamism). In the family relations, he automatically placed himself in the position of the victim. Psychotic or suicidal content was not explored. Cognitive and intellectual functions were normal. He was with partial insight and critical about his state. During hospitalization, underwent treatment. EEG is point the predominantly beta route. From the findings of psychologists: cognitive ability in relation to chronological age is preserved and do not indicate significant deviations in the direction caused by organic cerebral dysfunction. At the level of personality, a tendency to somatization of anxiety was shown. Profile test recorded an increase on the scale of hypochondria. The signs of personality disorder were indicated. On an emotional level, a sense of deprivation dominated. Patient was prone to increased risk. Self-image was disrupted. Common defense activity was moderate. The predominant defense mechanisms were projection and intellectualization. Doubts to the 'reasons of others' and see the guilt in them. It's possible rejection of close ones. He isolates feelings. Due to the low repression fear can overwhelm him.

Treatment was conducted by combination of psychopharmacs: maprotiline (75 mg / day), diazepam (20 mg / day), clonazepam (2mg/day) and tramadol (50 mg / day) that patient was self titrated. When the therapy was tried to correct, the patient reported worsening pain syndrome, and further intervention was canceled.

Within one year the patient was hospitalized again. He states further deterioration of mental condition. He was depressed, tense and in bad mood. The deterioration associated with the anniversary of the mother's death. He states that the deterioration is repeated every year. He also do not see improvements in the treatment of primary disease (dystonia) because why he feels discouraged. Botulinum toxin therapy is not effective. He states that his feelings are completely gone, burned out. Deterioration of mental state is manifested on physical status. The pain and muscle contractions were intensified.

The correction of treatment was carried out. Apart from the previously prescribed therapy, clonazepam, diazepam and maprotiline, in therapy was included the atypical antipsychotic quetiapine in the evening dose of 50 mg, and it has been detected increase dose of painkiller tramadol on his own initiative compared to the first hospitalization.

During hospitalization combinations of psychopharmacological agents on patients were used to reduce tension. Changes are observed in the field of mood which was brighter and more stable. Vital dynamisms were in slight improvements. He was more critical in the cause of psychological disturbance. He showed the intention to resist the treatment and psychotherapy.

Discharged with a recommendation for continuation of treatment through a daily hospital. Ambulant psychiatry support, regular neurological control and continue psychopharmacological agents were recommended.

He was verbalized economic issues. He was without a regular income and unable to employ.

DISCUSSION

Psychogenic dystonia is uncommon in clinical practice causing many difficulties in the diagnostic evaluation. Basic examination on this patient was directed to the exclude of organic causes and is conducted by a neurologist.

Considering the existence of dystonia and psychiatric symptoms, the most important mental health issue was the identification of existing comorbid mental disorders on axis I and axis II according to DSM-IV classification. The psychiatric examination consists of extended targeted approach with: interview, Structured Clinical Interview for Axis I and Axis II (SCID 1, SCID 2)) and psychological testing.

Rapid diagnosis and start of appropriate treatment is crucial for better prognosis. The relatively long period of time since the beginning of the first manifestations of dystonia and psychiatric treatment, in this case proved aggravating circumstances.

In this case it was determined the existence of premorbid psychiatric diagnoses. Anxious-depressive disorder on Axis I and Borderline personality disorder on Axis II, with occasional panic attacks that did not meet the criteria for the diagnosis of panic disorder. Dystonia is treated with Botulinum toxin the first choice treatment for this disorder. Consequently resistant to the treatment was attributed to the long and resistant psychiatric comorbidity. The modest therapeutic advances in our patient are in correspondence with the data found in the recent literature - even 75% patients with psychiatric comorbidity have tendency to channel anxiety into the body (Ron AM 1994). This is confirmed for our patient with conducted psychological test. Also long-lasting psychiatric disorder inadequately treated worse prognosis (Feinstein et al. 2001).

Many years of inadequate family constellations and unresolved conflicts pose to the patient a permanent source of discontent and feelings of hopelessness that after the occurrence of symptoms are reflecting on existing neurological disorders. Considering that over 50% of patients with developed dystonia verbalize trigger momentum for the development of the disease (Stewart et al.1995), we considered possibility that losing a mother as a permanent and secure object initiated the further development of psychopathological processes, with the intensification of mental disorders in the direction of panic attacks, anxiety and depressive symptoms, and the subsequent development of psychogenic movement disorders.

Secondary patient's social dysfunction is the result of neurological disorders. The loss of job and existential problems affect a wider range of its quality of life.

After the second hospitalization, the use of appropriate pharmacotherapy and psychotherapy with integration in program of day hospital reveals the improvement of mental condition wich also leads to the optimistic attitude toward patient treatment of dystonia, but still lags behind retroflexion and rotation of the head.

CONCLUSION

Psychogenic dystonia is a relatively a rare but severe and very limiting disease. Adequately and timely diagnose and start of appropriate therapy is important for the success of treatment and prognosis of the disease. A significant problem is demonstrated by the existence of comorbid psychiatric entities, and their therapeutic refractivity. In the context of the above seems an appropriate conclusion given by Fahn S. 1994: "Symptoms of psychogenic dystonia will disappear when the patients are willing to renounce them."

We believe that timely, multidisciplinary approach to treatment (neurological, psychopharmacological and psychotherapeutic) could provide a partial reduction of symptoms or even complete remission. This, unfortunately, was not the case in our example, but this approach can help patients to more easily coping with the disease and creating conditions for improving the quality of life.

REFERENCES

- 1. Dauer WT, Burke RT, Paul Greene P & Fahn S: Current concepts on the clinical features, aetiology and management of idiopathic cervical dystonia. Brain, 121, 547-560; 1998.
- Fahn S: Psychogenic movement disorders. In: Marsden CD, Fahn S, eds. Movement disorders 3. Oxford: Butterworth Heinemann, 359-72.1994.
- 3. Feinstein A, Stergiopoulos V, Fine J & Lang AE: Psychiatric outcome in patients with a psychogenic movement disorder: a prospective study. Neuropsychiatry Neuropsychology Behav. Neurol. Volume 14 - Issue 3 -pp 169-176. 2001.
- 4. Factor AS, Podskalny GD & Molho ES:Psychogenic movement disorders: frequency,clinical profile, and characteristics. Journal of Neurology, Neurosurgery, and Psychiatry; 59:406-412; 1995.

- 5. Goetz CG & Pappert EJ: Texbook of clinical neurology. Hardcover 1999.
- 6. Lencer R, Steinlechner S, Stahlberg J, Rehling H, Orth M, Baeumer T, Rumpf HJ, Meyer C, Klein C, Muenchau A & Hagenah J: Primary focal dystonia: evidence for distinct neuropsychiatric and personality profiles. J Neurol. Neurosurgery Psychiatry. Oct; 80:1059.2009.
- 7. Reich SG: Psychogenic movement disorders. Semin Neurol. Jul; 26:289-96; 2006.
- 8. Ron AM: Somatisation in neurological practice. Journal of Neurology, Neurosurgery, and Psychiatry; 57:1161-1164; 1994.
- 9. Thomas M & Jankovic J: Psychogenic movement disorders: diagnosis and management. CNS drugs; 18; 439-452; 2004.
- 10. Wenzel T, Schnider P, Wimmer A, Steinhoff N, Moraru E & Auff E :Psychiatric comorbidity in patients with spasmodic torticollis." J Psychosomatic research. Wol.44.687-690.1998.

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