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Case Report

Rare presentation of conversion disorder: psychogenic blepharospasm

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Abstract: Blepharospasm is an abnormal uncontrolled contraction of eyelid muscles and can be a presenting motor symptoms of conversion disorder. Here is a case about 40 years old Muslim housewife from rural background presenting with the complaints of difficulty in opening eyes for 6 months and pseudo-seizures for 2 months. Her symptoms could not be explained by any known medical conditions. Both psychological and pharmacological intervention was given for the management of the patient.

Keywords: Blepharospasm; conversion disorder; rare disorders.

Introduction

Conversion disorder, also called functional neurological symptom disorder in the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5), is an illness of symptoms or deficits that affect voluntarily motor or sensory function, which suggest another medical condition, but that is judged to be caused by psychological factors because the illness is preceded by conflicts or other stressors.[1] Conversion disorder is a historical conceptual sequel of hysteria. In the later years of nineteenth century Charcot, a French neurologist suggested at first the symptoms of hysteria were caused by a functional disorder of brain.[2] Later Pierre Janet conceptualized hysteria as a dissociative disorder.[2] Janet's contemporary Sigmund Freud also considered as a trauma-based disorder. However, Freud later conceptualized that somatoform symptoms of hysteria as a result of a neurotic defense mechanism and referred to them as conversion disorder whereby hidden, unexpressed emotion transformed into physical symptoms.[2]

The prevalence of conversion disorder in the general population is difficult to determine and estimate vary widely. A review of 5 studies indicates an incidence rate of 5-12 per 100000 per annum.[3] Conversion disorder is two to three times more common in female as per DSM-5.[3] One study from Bangladesh reported that motor symptoms present in 19% of patient with conversion disorder.[4] Blepharospasm is one of the motor symptoms of conversion disorder. Blepharospasm is an uncontrolled spasmodic contraction of the orbicularis muscles of the eye resulting in an abnormal tic or twitch of eyes.[5] It usually lasts for seconds to minutes but in severe cases eyes may be closed for hours. It may be essentially benign or secondary due to lesion in basal ganglia, pyramidal tract and trauma, local pathology in the eyes or drug induced. One effective treatment is intramuscular injection of botulinum toxin and this treatment is effective in 90% cases.[6,7]

Case Report

A 40-year-old, homemaker, Muslim married woman, educated up to class 5 hailing from a rural area of Bangladesh was admitted in National Institute of Mental Health with episodic difficulty in opening of eyes most of the day with associated eye irritation and pain and the problems were increasing in intensity for last 6 months. It was not associated with photophobia, blurring of vision, watery discharge or diurnal variation. Sometimes her symptoms relieved spontaneously. There was also history of fit like attack - 5 times in last 2 months which lasted for variable durations and was not association with tongue bite, frothing, urinary incontinence, injury, cyanosis, amnesia, etc. It always occurred in front of family members and never occurred in sleep. She also complained about tension type headache associated with neck pain for several years which is relieved by taking medication. No aggravating factor was reported. Five years back she had a history of fit like attack which occurred 6 days following a

road accident. She consulted with a general physician and treated by flupentixol and melitracen combination. She continued it for 5 years then discontinued this medication for last 6 months after developing unusual muscle twitching at lower eyelid & adjacent part of face in the right side. But her symptoms were deteriorating even after discontinuation. In the meantime, she also consulted with an ophthalmologist and a neurologist. She was treated by several antibiotics, steroid eye drops and low dose of antidepressant for last 1 year but her symptoms were increasing day by day. Lastly, she was diagnosed as a case if essential blepharospasm of right side one month back and Inj. botulinum 25 unit was given. But no improvement occurred.

The patient had three sisters & two brothers. She was 4th among them. Her younger brother died five years back due to physical illness. She has been married for 24 years. Her husband lived in his working place and used to come home every 2 months. Both of them said to be satisfied with their sexual life. her son is studying in honors & daughter is in class 11. She had a history of spontaneous miscarriage one year back. Relationship with her family & neighbors was good. Her father had psychiatric illness and took medicine but couldn't mention details except occasional outgoing tendency but his functional status was normal.

On mental state examination, her eyes were closed and she entered into the room with the assistance of her daughter, was trying to open her eyes by fingers. While interviewing, occasionally, she was opening her eyes by her own, eye to eye contact was established for a while but didn't sustain. Her facial expression was anxious. Her mood was euthymic and affect was mood congruent. Regarding thought she was anxious about her eye problems. She stated that she had eye problems and couldn't understand the cause but she need treatment. General and neurological examination reveals no abnormalities. All her routine investigations including complete blood count, TSH level, CT scan of head were within normal limit. Her treatment was started with cognitive behavioral therapy, then with sertraline and mirtazapine. Psychoeducation to her family members were given to reduce reinforcement. Few days after starting the medications, she was able to open eyes on her own most of the day. She was advised to continue regular medications and follow up.

Discussion

This case highlights several important issues and challenges. Diagnosis of the patient was one of them. In a metanalysis, the common conversion symptoms found were motor symptoms, sensory symptoms, pseudo seizure and mixed type.[8] In another study Guz and his colleagues found that nearly 45% of patient had a combination of symptoms (a mixed presentation). In this study researchers also found seizure or convulsion (25.3%), motor symptoms (25.3%) and sensory symptoms (4.6%).[9] In a Dutch study it was found that motor symptoms were highest (56%) among the respondents followed by mixed symptoms (30%), seizure (8%) and sensory symptoms (6%).[10]

In this case, the patient was presented with blepharospasm and fit like attack (pseudo-seizure) and initially diagnosed as benign essential blepharospasm by an ophthalmologist on the basis of history, clinical examination and exclusion of other disease. Though she was initially treated by injection botulinum (25U) single dose which is the standard treatment for BEB,5 but her symptoms were not improved. Then she consulted with a psychiatrist. After careful history taking and mental state examination, we found she had episodic difficulty in opening eyes most of the day with association of eye irritation and pain in increasing intensity and duration which was not associated with photophobia, blurring of vision, watery discharge or diurnal variation. Sometimes her symptoms relived spontaneously. There is also history of fit like attack (pseudo-seizure) 5 times in last 2 months with variable duration. It always occurred in front of family members and never occurred during sleep.

As the patient took flupentixol and melitracen combination for 5 years, one differential diagnosis we considered was tardive dystonia. Studies reported that tardive dystonia occurs in 0.04%-4% of the persons treated with dopamine receptor antagonist.[11,12] Blepharospasm is more common among patients with tardive dystonia. But tardive dystonia was excluded after failure of botulinum toxin injection. On the basis of these symptoms diagnosis made was conversion disorder with mixed symptoms, Persistent without psychological stressors. Blepharospasm may present in a few cases of conversion disorder and fit like attack present in 33% cases of conversion disorder.[4] In this case, no specific stressor could be identified. As per recommendation, cognitive behavior therapy was initially applied for management of conversion disorder but there was little improvement. Patient was then prescribed sertraline which was found effective on conversion disorder in some studies at 25 to 300mg of doses.[13] In this case, the patient was given 50 mg once daily dose. Due to patient's sleep problem, mirtazapine was added at night at 15mg dose. Then her symptoms started to improve gradually.

As we can see, early recognition of conversion disorder could limit unnecessary tests and medications. The existing medical literature supports a multidisciplinary treatment approach with specific interventions for conversion disorders with rare presentations. Long-term benefit likely requires a comprehensive treatment approach, recognition of risk factors and treatment of comorbid conditions with a focus on cognitive styles that perpetuate symptoms.

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