DOI: 10.7860/JCDR/2019/40120.12551

Videos

Internal Medicine Section

A Case of Functional Dystonia

NIKHIL DARAK[1], AMIT BAHETI[2], SOURYA ACHARYA[3], PARAG MOON[4]

Dear Editor,

A 42-year-old female presented with complaints of sudden onset of abnormal movements in all four limbs, including face, approximately 30 minutes after she saw a snake in her garden while planting a shrub [Video-1]. There was no history of unconsciousness. On clinical examination, when the patient was distracted the abnormal movements were reduced in intensity. There was preserved pincer function (extension of the thumb and index finger with forced flexion of the other fingers of the hand). She was emotionally disturbed from one week because of a quarrel with her husband who was still not in talking terms with her. One year ago patient's father died after the snake bite.

MRI Brain with contrast revealed no abnormality. Patient was started on Tab. Clonazepam 0.5 mg twice daily for three days, simple exercise of compressing the centre of palm of one hand with the thumb of other hand and vice versa for five minutes, four times per day, and relatives were advised to provide emotional stability to the patient. After three days of hospitalisation and treatment, the patient responded well and symptoms were reduced.

The video is available at: https://jcdr.net/article_fulltext.asp?id=12551

DISCUSSION

Psychogenic Movement Disorders (PMD) is a group of movement disorders that cannot be attributed to any known structural and/or organic defect of nervous system. Most cases of PMD are considered to be psychologically mediated [1].

The study of abnormal muscle movements, the so-called dyskinesia, has always been a fascinating problem for the physician, both from clinical as well as pathological point of view. The clinician finds great difficulty in establishing definite clinical groups because at the onset he is confronted with the question as to whether a particular bizarre movement is a symptom of a distinct clinical entity, or whether such a movement is a real pathologic process [2].

Functional dystonia belongs to a group of disorders called functional movement disorders. Patients with functional movement disorders experience a mix of motor symptoms including dystonia, tremor, myoclonus, gait disorders, and tics. The patients may also experience pain, weakness, sensory symptoms, non-epileptic seizures, and other functional neurological symptoms. Functional dystonia is commonly seen in people with psychiatric disorders after exposure to psychological stressors. However, psychological stressors are "neither necessary nor sufficient" to establish the diagnosis [2]. Treatment of the underlying emotional and mental disorders especially in form of Cognitive Behavioural Therapy (CBT) can reduce the movement symptoms [3].

Functional dystonia can affect different areas of the body and may share some characteristics with dystonia due to other causes, but also has distinguishing features. Common expressions of functional dystonia include dystonia of the face, blepharospasm, fixed dystonia, and episodic dystonia. Functional dystonia predominantly involving the face occurs in approximately 16% of all FMDs [4]. Females are most commonly affected [5-7]. The present patient faithfully reflected all the above mentioned factors.

Possible indicators of functional dystonia are, sudden symptom onset, psychological stress preceding symptom onset, unpredictable symptoms across time, symptoms contradict the hallmark features of other neurological disorders and are lessened with distraction, spontaneous remissions and relapses, psychiatric symptoms, and medically unexplained symptoms [8].

Diagnosing functional dystonia can be difficult. A person may have a specific neurological movement disorder in addition to functional symptoms.

According to phenotype-specific criteria, three features are needed to label clinically definite functional dystonia. They are: 1) Rapid onset, which clearly demarcates it from organic dystonias which are usually gradual in onset; 2) Fixed dystonia at rest; and 3) Variable resistance to manipulation and/or distractibility. Features that are supportive but not necessary or sufficient are; associated pain not involving the neck and complex regional pain syndrome [9,10]. The present patient had all the criteria for definitive diagnosis.

There are four distinctive functional dystonia: 1) Hands: there are fixed wrist and finger flexion often with relative sparing of the thumb and index fingers, classically noted in the present patient's video in the left hand; 2) Foot: fixed foot plantar flexion and inversion; 3) Face: unilateral lip and jaw deviation, as seen in the present case predominantly to the right side; 4) Neck: laterocollis with ipsilateral shoulder elevation and contralateral shoulder depression [10,11]. In the present patient shoulder elevation was seen on the right side.

The diagnosis of functional dystonia is strictly clinical. No laboratory or imaging investigations are needed for establishing a clinically definite diagnosis of functional dystonia. They are invariably normal [12]. It is needless to subject the patient for neuroimaging. In this case, the patient was subjected for an MRI of brain which was normal, but, if any incidental abnormal lesion would have been picked up, was not going to explain the dystonic movements.

REFERENCES

[1] Kranick SM, Tristan Gorrindo T, Hallett M. Psychogenic movement disorders and motor conversion: a roadmap for collaboration between neurology and psychiatry. Psychosomatics. 2011;52(2):109-16.
[2] Hallett M. Functional (psychogenic) movement disorders-clinical presentations. Parkinsonism Relat Disord. 2016;22(01):S149-52.
[3] Ricciardi L, Edwards MJ. Treatment of functional (psychogenic) movement disorders. Neurotherapeutics. 2014;11(1):201-07.
[4] Ganos C, Edwards MJ, Bhatia KP. The phenomenology of functional (psychogenic) dystonia. Mov Disord Clin Pract. 2014;1(1):36-44.
[5] Schwingenschuh P, Katschnig P, Edwards MJ, Teo JTH, Korlipara LVP, Rothwell JC, et al. The blink reflex recovery cycle differs between essential and presumed psychogenic blepharospasm. Neurology. 2011;76(7):610-14.
[6] Tan EK, Jankovic J. Psychogenic hemifacial spasm. J Neuropsychiatry Clin Neurosci. 2001;13(3):380-84.
[7] Fasano A, Valadas A, Bhatia KP, Prashanth LK, Lang AE, Munhoz RP, et al. Psychogenic facial movement disorders: clinical features and associated conditions. Mov Disord Off J Mov Disord Soc. 2012;27(12):1544-51.
[8] Williams DT, Ford B, Fahn S. Phenomenology and psychopathology related to psychogenic movement disorders. Adv Neurol. 1995;65:231-57.

[9] Factor SA, Podskalny GD, Molho ES. Psychogenic movement disorders: frequency, clinical profile, and characteristics. J Neurol Neurosurg Psychiatry. 1995;59(4):406-12.
[10] Morgan JC, Sethi K, Lang AE. Progression of dystonia in complex regional pain syndrome. Neurology. 2005;64:2162-63.
[11] Espay AJ, Lang AE. Phenotype-specific diagnosis of functional (psychogenic) movement disorders. Curr Neurol Neurosci Rep. 2015;15(6):32.
[12] Schrag A, Trimble M, Quinn N, Bhatia K. The syndrome of fixed dystonia: an evaluation of 103 patients. Brain. 2004;127:2360-72.

PARTICULARS OF CONTRIBUTORS:
1. Resident, Department of Medicine, DMIMS University, JN College, Wardha, Maharashtra, India.
2. Resident, Department of Medicine, DMIMS University, JN College, Wardha, Maharashtra, India.
3. Professor, Department of Medicine, DMIMS University, JN College, Wardha, Maharashtra, India.
4. Assistant Professor, Department of Neurology, DMIMS University, JN College, Wardha, Maharashtra, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:
Dr. Sourya Acharya,
Professor, Department of Medicine, ABVR Hospital, DMIMS University Sawangi (Meghe) Wardha, Maharashtra, India.
E-mail: souryaacharya74@gmail.com

FINANCIAL OR OTHER COMPETING INTERESTS: None.

Date of Submission: **Nov 01, 2018**
Date of Peer Review: **Nov 22, 2018**
Date of Acceptance: **Dec 11, 2018**
Date of Publishing: **Feb 01, 2019**