Psychogenic facial movement disorder: a case report

Eren Gözke1, Boran Can Saraçoğlu1, Mustafa Eser1, Aylin Reyhani1, and Pelin Doğan Ak1

1Neurology department, Fatih Sultan Mehmet Education and Research Hospital, Istanbul, Turkey

Correspondence: Eren Gözke
Neurology Department, Fatih Sultan Mehmet Education and Research Hospital, Atasehir / Istanbul, Turkey
Email: egozke@hotmail.com

Abstract

Background: Psychogenic movement disorders (PMD) include a wide range of involuntary motor function disturbances that lack an organic cause. Presentation with the form of any known organic movement disorder can be seen. Psychogenic facial movement disorder (PFMD) is an interesting form of PMD and it is not yet fully characterized.

Case report: A 44-year-old female patient was evaluated because of deviation of her mouth. She was admitted to another hospital before, in which cranial MRI had been performed and did not demonstrate any abnormality. Steroid therapy had been initiated with the diagnosis of peripheral facial paralysis (PFP). The patient was admitted to our outpatient clinic because the deviation of her mouth was not resolved completely. Neurological examination revealed flattening of the right nasolabial fold and downward retraction of the contralateral edge of the mouth, which disappeared during talking and exacerbated at rest. These findings suggested psychogenic facial dystonia and she was diagnosed as having PFMD. Her steroid therapy was discontinued and treatment with alprazolam was initiated. A prominent resolution of her complaints was observed during post-treatment follow-up control visits.

Discussion: Although PFMD is not a rare condition, it is still under-recognized and under-treated. In patients with PFMD, phasic or tonic muscular spasms resembling dystonia can be seen. It involves most commonly the lips. A prompt diagnosis based on positive clinical signs will prevent unnecessary investigations and lessen the morbidity.

Keywords: Psychogenic movement disorders, Facial movement disorders, Peripheral facial paralysis.
Introduction

Psychogenic movement disorders (PMD) include a wide range of involuntary motor function disturbances that lack an organic cause or neurological basis. Presentation with the form of any known organic movement disorder can be seen [1]. The frequency of PMD in movement disorders ranges between 2–4% and nearly 30% of patients admitting to outpatient neurology clinics are psychogenic in nature [2-4]. It may cause significant distress or impairment in social, occupational, or other important areas of functioning [5].

PMD is a special clinical problem usually having extensive and unnecessary repeated evaluations. Early identification is critical because patients with shorter duration of illness have better outcomes [6]. Diagnosis occupies a grey zone between neurology and psychiatry. To make a positive diagnosis with the recognition of unique clinical signs is necessary, instead of exclusion of other disorders [7, 8]. Although 16.3% of patients with PMD present psychogenic facial movement disorder (PFMD), it is not yet fully characterized [8, 9]. PFMD can present with dystonia, hemifacial spasm, blepharospasm and other movement disorders [1]. Here, a case of PFMD misdiagnosed initially as peripheral facial paralysis (PFP) is presented together with video demonstrations.

Case report

A 44-year-old female patient was evaluated for a deviation in her mouth, which had developed 4 days prior to evaluation. She reported that it started abruptly after bathing. Cranial MRI, which was performed in another hospital, did not demonstrate any abnormality and steroid therapy was initiated with the diagnosis of PFP. The patient was admitted to our outpatient clinic because the deviation of her mouth did not resolve completely. She had hypertension, diabetes, and depression. She was taking indapamide, metformin, and citalopram. Neurological examination revealed flattening of nasolabial fold and downward retraction of the contralateral edge of the mouth, which disappeared during talking and exacerbated at rest. There was ipsilateral platysma involvement. She could close her eyes completely, and other neurological examination results were not remarkable (Figure 1 and Video 1). EMG findings were normal. Fluctuant flattening of the nasolabial fold and the impression of downward retraction of one side of the mouth suggested psychogenic facial dystonia. Her steroid therapy was discontinued, and treatment with alprazolam was initiated. A prominent resolution of her complaints was observed one week after treatment initiation (Figure 2 and Video 2).

Discussion

Although PFMD is not a rare condition, it is still under-recognized and under-treated. It occurs more commonly in women (92%) between the ages of 19–66 (mean age 37) [9]. The underlying mechanisms are still poorly understood [10]. In a study, Fasano et al. reported that all of sixty-one PFMD patients had phasic or tonic muscular spasms resembling dystonia, most commonly involving the

---

Video accessible at http://ijcnmh.arc-publishing.org

Video 1. Pre-treatment: The patient demonstrated downward protrusion of her left lower lip with ipsilateral mouth deviation. She also had flattening of the right nasolabial fold. These findings were attenuated during talking and exacerbated at rest. She could close her eyes completely, elevate her eyebrows, show her teeth without any asymmetry, purse her lips and open her mouth.

Figure 1. Pre-treatment: The patient demonstrated downward protrusion of her left lower lip with ipsilateral mouth deviation. She also had flattening of the right nasolabial mouth deviation.
Post-treatment: 1 week after the treatment, her symptoms almost completely disappeared.

Lips (60.7%), followed by eyelids (50.8%), perinasal region (16.4%), and forehead (9.8%) [9]. Tonic, sustained, lateral, and/or downward protrusion of one side of the lower lip with ipsilateral jaw deviation is the most common pattern (84.3%). Platysma involvement is very rare and bilateral in organic diseases. However, it is common and ipsilateral in PFMD [9]. In contrast to organic facial dystonia, which is action-induced, patients with psychogenic facial dystonia show exacerbations at rest. In this case, the patient had typical features of PFMD.

Depression (38%) and tension headache (26.4%) are the most commonly associated conditions. Hypertension (4.9%) is another frequent comorbidity of PFMD [9]. Our patient had depression and hypertension.

Early diagnosis is important because patients with shorter duration of disease have a better prognosis [4, 11]. Features that are regarded as characteristic of PMD include abrupt onset, fluctuations in symptom severity, spontaneous remissions, inconsistency, incongruency, distractibility, suggestibility, bizarre movements, deliberate slowness of movements and disproportional functional disability. Other clues are a dramatic increase of PMD by direct observation, physical or psychosocial triggers, secondary gain and normal diagnostic studies [3, 6, 9, 12]. Somatoform disorders are also very common [3]. A strong association between functional movement disorders and exposure to phenotypically similar movement disorder models was shown [10]. Response to placebo, suggestion or psychotherapy rather than improvement with drug treatments is another finding in these patients [1, 3].

Although many neurologists continue to use psychological factors as supportive criteria for PMD, Diagnostic and Statistical Manual of Mental Disorders (DSM-5) no longer requires the demonstration of psychogenicity [13]. Van der Hoeven et al. reported that 39% of PMD patients scored within the normal range on psychological questionnaires measuring general psychopathology, personality disorders, and psychological dissociation [14]. Maurer et al. measured the levels of circulating cortisol as a stress response and found no difference between the patients with PMD and healthy controls [2]. These two studies support the idea in DSM-5 criteria, but they should not be used for minimizing the importance of psychological factors in these patients. They should rather be used for not supporting extensive exploration of PMD patients even when they deny the presence of psychological stress, because this may be misleading by leading to unnecessary costly investigations, delaying the initiation of appropriate treatment and negatively influencing the doctor–patient relationship [2, 15].

There is no standard protocol for the treatment of PMD. A multidisciplinary approach including psychologist, social worker, physiotherapist, psychiatrist and neurologist can provide markedly better patient care. Patient and family education, cognitive and behavioral approaches, physiotherapy and medical treatments are helpful [3, 9, 17]. Spontaneous remissions can also occur. Fasano et al. reported that 21% of patients with PFMD had spontaneous remissions [9].

To the best of our knowledge, there are few case reports of PFMD in the literature. Being aware of PFMD and offering these patient prompt diagnosis will improve their quality of life and lessen the morbidity of the disease.

**Abbreviations**

DSM-5: Diagnostic and Statistical Manual of Mental Disorders. PMD: Psychogenic movement disorder; PFMD: Psychogenic facial movement disorder; PFP: Peripheral facial paralysis.
Competing interests

The authors declare no conflict of interest.

References


