Blepharospasm as an Obsessive-Compulsive Phenomenon

To the Editor: Blepharospasm is a type of focal dystonia characterized by involuntary contractions of the orbicularis oculi muscles, with subsequent continuous or intermittent eyelid closures. It a disabling condition with poor treatment results. Although studies have reported higher prevalence of psychiatric disorders in these patients, it is not clear whether blepharospasm is etiologically linked with them, or is a part of reaction to its disability. This case report highlights the phenomenology of blepharospasm as an obsessive-compulsive phenomenon.

Blepharospasm has been known to occur in variety of organic disorders and is most often idiopathic in nature. The disorder is classified as a form of focal dystonia and has been linked to basal ganglia dysfunction.[1–3] Although it is an important phenomenon, its significance in psychiatric disorders has been negligible. Some studies have reported higher rates of psychiatric disorders in patients with blepharospasm, especially obsessive compulsive disorder (OCD).[4,5] However, whether these psychiatric symptoms represent a reaction to this disabling condition or are etiologically linked to the motor symptoms of blepharospasm is not clear. Recent meta-analysis of imaging studies in OCD has demonstrated evidence of the dysfunction of basal ganglia, especially caudate and frontal subcortical structures.[6] This case report highlights the phenomenology of blepharospasm as an obsessive-compulsive phenomenon. Clomipramine yielded good improvement in this case. This case suggests that each and every patient in a psychiatry clinic who has a history of blepharospasm should be evaluated and assessed in detail before labeling the patient as a case of idiopathic blepharospasm.

Case Report

A 35-year-old married man was referred from the neurology department for psychiatric evaluation for complaints of sudden involuntary bilateral eye closure occurring for around 1–2 minutes and occurring repeatedly. These would be exacerbated by air pollution, wind, exposure to bright light, movement, and stress and would be relieved by talking, relaxation, and sleep. There was no history of any chronic physical illness, including neurological illnesses such as parkinsonism, Wilson's disease, epilepsy, stroke, nor a history of ocular pathology (e.g., blepharitis, conjunctivitis, or iritis) or intake of any drug in the recent past. He did not have any other abnormal body movements. There was no family history of any movement disorder. A diagnosis of essential blepharospasm was made. He was treated with various drugs including antipsychotics, tetrabenazine, clonazepam, trihexyphenidyl, and lubricating eye drops without much response. General physical examination, laboratory investigations, including venereal disease testing, EEG, brain MRI, and ocular examination including fundus examination were normal.

Detailed psychiatric assessment revealed that the patient would try to resist these movements but would not be able to do so. Also, there was a history suggestive of mild obsessive-compulsive symptoms in the form of contamination obsessions, repeated hand-washing, and pathological doubt for the last 15 years. However, the patient was not distressed by these symptoms and did not have significant socio-occupational dysfunction because of these symptoms; he was distressed by blepharospasm. Also, family history revealed a history of obsessive-compulsive disorder in the patient's mother and maternal aunt. Mental status examination revealed frequent eye closures, contamination obsessions, and pathological doubt. The patient was in marked distress because of blepharospasm. In view of this, he was started on clomipramine 25 mg per day, increased to 200 mg per day. No other medication was started. The patient gradually started showing improvement in blepharospasm as well as in his obsessions and compulsions and was completely symptom-free after 4 months of regular therapy.

Discussion

The most salient finding for this patient was that clomipramine 200 mg/day was efficacious for his blepharospasm and obsessive-compulsive symptoms (OCS), simultaneously, especially blepharospasm, which was not responding to conventional treatment strategies.

Focal dystonias, including blepharospasm, might be phenomenologically similar to OCD in terms of the repetitive, perseverative, and persistent nature of the symptoms. In our case, the blepharospasm most likely represented a component of OCD, as it developed after a long period of mild OCS, and the

symptoms developed at an early age, and blepharospasm generally occurs at a later age and is more common in women. The most important point favoring our hypothesis is the fact that the patient responded to clomipramine, which is often used for the management of OCD.

The occurrence of obsessive-compulsive symptoms as part of the postencephalitis parkinsonian syndrome stimulated the search for a biological link between basal ganglia dysfunction and obsessive-compulsive symptoms.[7] Compulsive behavior and obsessional thinking have been observed after basal ganglia lesions. An association of OCD with various movement disorders has been noted in the literature.[8] We hypothesize that both these disorders result from the involvement of common brain structures and neurocircuitry. Both blepharospasm and OCD involve pathology of basal ganglia-thalamic structures. Although the literature shows conflicting reports of prevalence of OCD in patients with blepharospasm,[4,5,9,10] our report describes the fact that blepharospasm can occasionally occur as a part of OCD and might respond to anti-obsessive drugs. Detailed evaluation of patients with only blepharospasm is warranted for better management of these patients. Also, it is important to clarify the role of anti-obsessive drugs, especially clomipramine, for the management of movement disorders, as has been suggested previously.[11] There is a dire need for evolution of therapeutic strategies that address both behavioral and motor components of obsessive-compulsive disorder with basal ganglia lesions.

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