Orofacial Dystonic Movements mimicking as Recurrent Temporomandibular Joint Dislocation – A Case Report

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Abstract:

Oromandibular dystonia is a type of focal dystonia that is extremely rare in its incidence. It accounts for various clinical presentations like abnormal perioral, tongue to oropharyngeal movements. These muscular movements are short and sustained resulting in uncontrolled mouth opening or closure, jaw deviation and facial expressions. This disorder is usually missed by the clinician and is being misunderstood as recurrent temporomandibular joint dislocation. One of this rare case reported to our department with the same chief complaint of recurrent temporomandibular joint dislocation and was earlier treated with the same intervention as being followed for temporomandibular joint disorders. Later a thorough clinical history, radiographic findings, neurosurgical consultation and family history of the patient helped us to make a conclusive finding of it as an oromandibular dystonia.

Keywords: Dystonia, Oromandibular Dystonia, Temporomandibular Joint Disorders.

Introduction

Oromandibular dystonia (OMD) was first being reported by a French neurologist Henry Meigh in 1910[1] OMD is a type of focal dystonia which leads to the altered or sustained movements of perioral muscles, tongue and pharyngeal muscles. In these musles involuntary and repetitive movements results in altered facial expressions, closure or opening of jaw, deviation of jaw and leading to poor social acceptance of the patient.[2] Dystonia can also be classified according to its etiology as idiopathic and inherited or familiar. OMD accounts for 6.9/100000 persons in United States. The disease onset is between 30 to 70 years of age and 2 times it is more common in females.[1] OMD can be further classified as jaw opening type, jaw closing type, lateral movement type, out of which jaw opening type is most common type.[3] OMD have varied etiologies ranging from long term use of neuroleptic drugs, organic brain lesions and any kind of dental maneuver which could lead to periphery injury.[2] Our case was of OMD with altered facial expressions and involuntary opening of jaw. The patient came to us with a complaint of recurrent jaw dislocation and was with the help of history, diagnostic modalities and neurosurgeons consultation diagnosed as oromandibular dystonia.

Case Report

A 60 years old male patient reported to our department of oral and maxillofacial surgery

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with a chief complaint that he is not able to close his mouth (Fig. 1). Before coming to our department he visited a dentist who advised him barrel bandage and prescribed him analgesics for symptomatic relief. Patient was then referred to our department and here clinically perioral altered movements were noticed with inability to close his mouth and abnormal speech and lisping was noticed. These episodes were not continuous and used to relieve after few minutes. In the family history it revealed that patient's father also had an undiagnosed disease of neuromuscular disorder, as could be Parkinson's disease if clinical symptoms are to be correlated. A routine panoramic radiograph and TMJ open and close view was done and it showed normal articular eminence and condylar morphology (Fig. 2a and 2b). So it was provisionally diagnosed as a case of TMJ dislocation with a differential diagnosis of oromandibular dystonia. CT scan and MRI brain were done for the patient which revealed no soft tissue or hard tissue abnormality and MRI showed no brain lesion or abnormality (Fig. 3a and 3b). Correlating the clinical features, familiar history and radiographic findings we came to a definitive diagnosis of oromandibular/perioral dystonia. Arch bars were applied and elastics were given to the patient. Tab. Alprazolam 0.25 mg was prescribed once in a day at night. Patient again reported to our department with broken elastics but had some improvement in his general clinical features. This time heavy elastics were put and patient was recalled after every 3 days. A neurophysician was consulted and he also diagnosed it as a case of perioral dystonia. Neurophysician prescribed him Tab. Trihexyphenidryl Hydrochloride 4mg TDS, Tab. Clonazepam 0.5 mg TDS, Tab. Haloperidol 1.5 mg BD and Tab. Tetrabenazine 25 mg BD for 10 days (Fig 4).

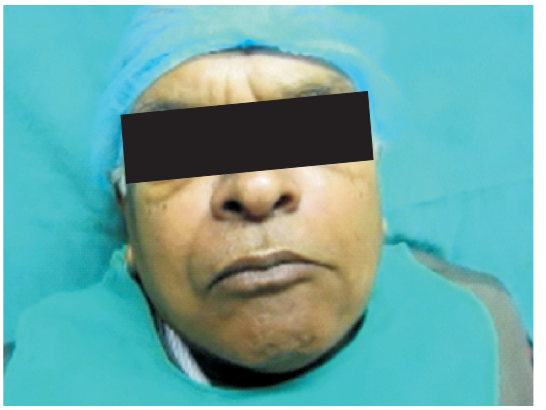

Fig. 1 : Pre operative photos showing dyskinetic movement of lip and jaws.

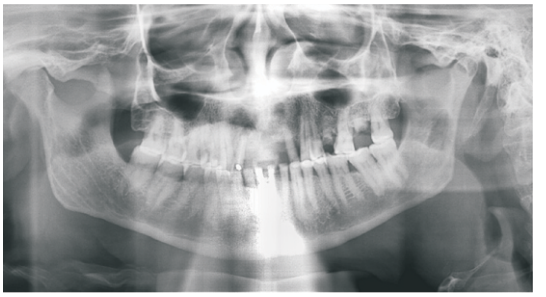

Fig. 2 a : Pre-op Orthopantomogram showing no sign of B/L intra articular changes.

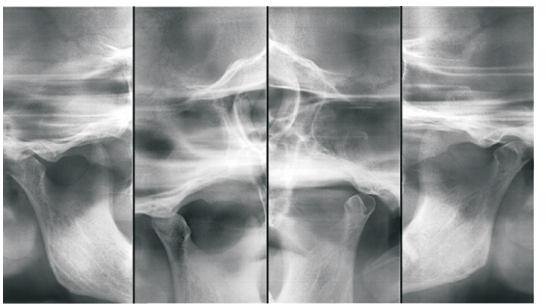

Fig. 2 b : TMJ open and closed view showing no sign of dislocation.

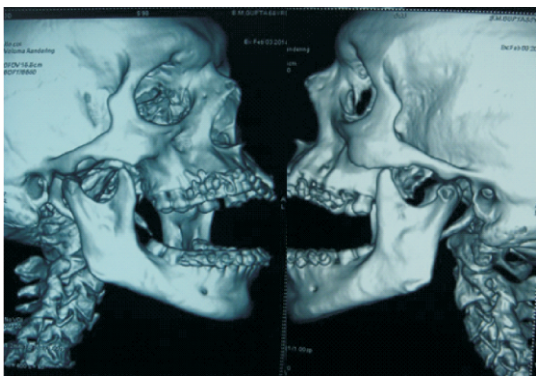

Fig. 3 a : Pre-op 3-D CT revealing no sign of condylar pathology and articular eminence in normal limit.

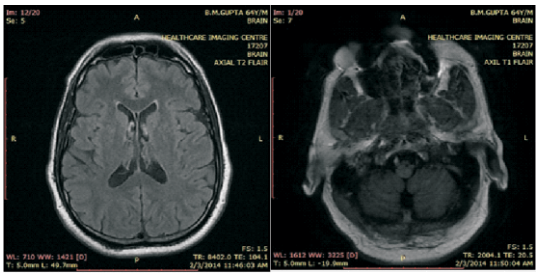

Fig. 3 b : MRI Brain- no pathology detected in basal ganglion.

Fig. 4 : Post Operative photo – improved condition.

Discussion and Conclusion

Oromandibular dystonia is a rare condition and is often misdiagnosed as bruxism, spontaneous temporomandibular disorders, hemimasticatory or hemifacial spasm and any psychological expression.[1] Meige's syndrome a rare type of focal dystonia can also be present which have clinical symptoms of bilaterally involuntary activity in the facial and mandibular muscles in combination with blepharospasm.[4] The correct early diagnosis of this disease is required for the early relief of the patient. The other common possibilities like temporomandibular joint disorders have to be ruled out clinically and with the aid of radiographs. In our case the panoramic radiograph showed that the condylar head and articular eminence were normal and showed no abnormalities. Further CT scan was advised and it revealed no hard or soft tissue abnormality in the peri - articular temporomandibular joint region. After the evaluation of these findings it was clearly diagnosed as a case of oromandibular dystonia. For any central etiology MRI brain was advised to the patient which was also normal and thus a neurophysician consultation was taken. Neurophysician finally also declared it that it is a case of OMD pertaining as temporomandibular joint dislocation. EMG studies were not done for the patient as such initial treatment protocol followed by us relieved the patient. The pharmacological treatment was done for the patient which included the use of anticholinergics and benzodiazepines that is usually the first line of treatment for OMD.[3] In the reported literature it has been said that fabrication of prosthesis had also temporarily relieved the symptoms but no long term follow up studies are present which proves it to be an efficient method.[5] Botulinum toxin had also been proven to be a superior treatment regime.[4] After these medicinal treatments are not being able to give effective results so surgical treatment is being opted. Thus an effective treatment planning lead to the proper pharmacological treatment of the patient as such long term follow up of the patient is to be done to check the efficacy of the pharmacological treatment.

However besides the treatment protocol which could be followed for the patient with OMD the thing which is of prime importance is the correct and early diagnosis of the disease which we achieved in our present case.

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