

## The Relationship between Oromandibular Dystonia and Temporomandibular Disorder

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**Received:** December 18, 2023

### Abstract

Dystonia leads to repetitive twisting movements, abnormal postures of the neck, trunk, limbs, or face, and sustained muscle contractions oromandibular dystonia, characterized by involuntary movements of the tongue and jaw, might be confused with temporomandibular disorders. study looked at the association between Temporomandibular disorder and oromandibular dystonia. We found that temporo mandibular disorder has been found in 77% of patients with oromandibular dystonia and in 25% without.

### Background

As a movement-based disorder, dystonia leads to repetitive twisting movements, abnormal postures of the neck, trunk, limbs, or face, and sustained muscle contractions.

As a rarely occurring neurologic condition, oromandibular dystonia is regarded as focal dystonia witnessed as jaw opening, deviation, or clenching, which can result in impaired swallowing and speech. Also, Oromandibular dystonia, characterized by involuntary movements of the tongue and jaw, might be confused with temporomandibular disorders.

In most cases, Oromandibular dystonia is related to the dystonia of the eyelids (blepharospasm), larynx (spasmodic dysphonia), or neck muscles (spasmodic torticollis/cervical dystonia). Sometimes, the combination of lower and upper dystonia is known as cranial-cervical dystonia. The oromandibular symptoms are task-specific at times and only experienced in the course of activities, e.g., chewing or talking. By contrast, the activities such as chewing and talking lead to decreased symptoms in a number of individuals. As a very common complication of oromandibular dystonia, difficult swallowing occurs when the jaw is affected by the disorder, and tongue spasms can also lead to difficulty in swallowing.

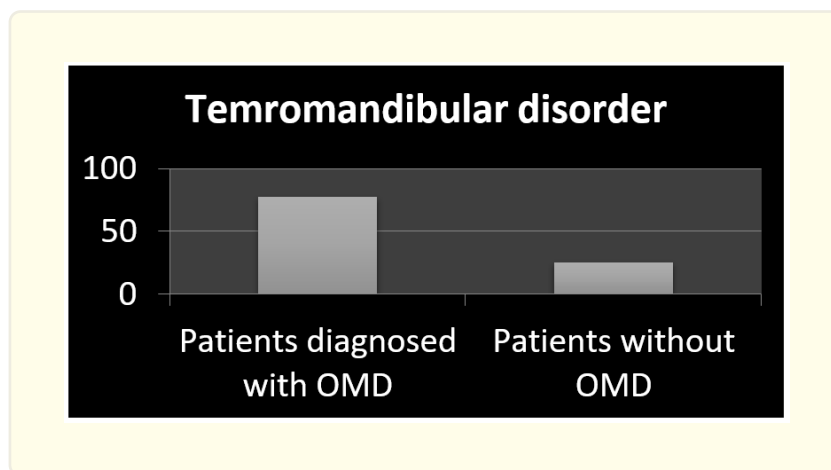
Temporomandibular disorder is considered a general term that refers to some clinical disorders which involve the temporomandibular joint, the masticatory musculature, as well as the related structures. The symptoms of these problems include facial pain in the TMJ region and the mastication muscles, TMJ sounds, or the deviation/limitation in the mandibular range of motion. The present investigation is aimed to validate the association between Temporomandibular disorder and oromandibular dystonia.

### Materials & Methods

The MeSH terms Dystonia AND Temporomandibular were used to search the PubMed and Google scholar data bases. Restricting the search to articles published after 2011, yielded 45 articles. After adding the inclusion criterias; english, humans, specific to dentistry, 6 articles were included.

## Results

Based on 65 patients presented in this 6 articles, we observed that temporomandibular disorder has been found in 77% of patients diagnosed with oromandibular dystonia and in 25% of patients without oromandibular dystonia.



## Discussion

Dystonias that affect the perioral and pharyngeal areas are called oromandibular dystonias (OMD). OMD affects the muscles of the jaw and can cause problems like trismus, mouth closure, tooth wear/loss, and oral soft tissue and temporomandibular joint (TMJ) damage [6]. In a 2019 study, Bakke and colleagues noted that dentists and neurologists may confuse the OMD and TMD and should be aware of reduce misdiagnosis by applying an interdisciplinary approach [5].

## Conclusion

The study concluded that Oromandibular Dystonia with involuntary movements of the tongue and jaw is prone to be confused with temporomandibular disorders in most patients. Perhaps, Oromandibular Dystonia can be regarded as a major precipitating factor in developing hypertrophic responses in the subchondral disc/bone, which finally leads to altered articular space. Sometimes the mechanical energy associated with oromandibular dystonia is so high that it may lead to dislocations in bilateral TMJ. Temporomandibular problems are predominantly experienced in individuals suffering from oromandibular dystonia, which may affect the muscles of the jaw and result in mouth-closing disturbance, trismus, damage to the Temporomandibular Joint, or tooth loss/wear.

## References

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**Volume 4 Issue 1 January 2024**

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