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Temporomandibular Disturbances in Burning Mouth Syndrome Patients.

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ABSTRACT

Burning mouth syndrome is an oral condition, still unsufficiently understood, which most commonly affects postmenopausal women. It manifests itself as burning, tingling or scalding sensation of tongue, lips, cheeks or throughout the mouth. One of the proposed and probable theories about BMS' aethiopathogenesis is that the underlying cause is a peripheral and/or central neuropathy. This can be put into correlation with temporomandibular disturbances as sensorial disturbances are also known as one of the probable causes of TMD. We have evaluated the symptoms of TMD in patients with BMS.

Keywords: burning mouth syndrome, temporomandibular disturbances, peripheral neuropathy, central neuropathy

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Burning mouth syndrome (BMS) is a disturbance manifesting with burning symptoms which usually affects postmenopausal women. Its aetiopathogenesis is poorly understood, however, peripheral and/or central neuropathy seems to be probable cause. Lately, it has been proposed that neurophatic alterations in BMS might correlate with TMD disturbances. It is known that temporomandibular pain may also be associated with sensorial disturbances when the pain is chronic and induces sensitization.

Therefore, we have evaluated temporomandibular joint in 42 patients with BMS (4 males and 38 females) (66.7±12 years).

PAIN	PATIENTS
Masseter region	6
Head and neck	5
Pterygoid region	3
TMJ region	5
CLICKING SOUND DURING MANDIBULAR OPENING AND CLOSING	
Bilateral	7
Unilateral	8
Limitations oft he mandibular movement on the side of TMJ dysfunction	6
TMJ X RAY	
Normal finding	33
Dysfunction	9

As stated by Corsallini et al. [1] it is possible that the same neuropathic alterations assumed for the BMS could be enagaged in parafunctional habits, main cause of TMD. Neuropathy seen in BMS results from nigrostriatal dopaminergic disturbance that affects nociception regulation, causing a complete loss of the inhibition of trigeminal system. This would consist of a sensory and motor hyperfunction and then a masticatory muscles hyperactivity with onset of TMD. Or it can be assumed that high percentage of TMD in BMS could be due to the overload of the masticatory system: anxiety and restlessness were frequently seen in detailed medical history as well as upon inspection of wear facets which might be due to the primary disease i.e BMS. Corsalini et al. [1] reported that 65.9% the BMS patients showed disorders classified as primary signs and symptoms of TMD according to RDC/TMD criteria, and 72.7% showed parafunctional habits. Most patients with BMS exhibited myofascial pain and internal derangements within TMD. There was a significant association between BMS and TMD. Da Silva et al. [2] evaluated 82 patients with chronic orofacial pain and reported that patients often had temporomandibular disorder (TMD) ($P=0.001$) and pain during facial ($P<0.001$) and neck palpation ($P=0.002$). Da Silva et al. [2] reported that TMD was a common secondary diagnosis prevalent in patients with trigeminal neuralgia. Therefore, its association with other chronic neuropathic pain may involve central sensitization, neurogenic inflammation and peripheral activation of muscles at the trigeminal complex. Goulet et al. [3] reported that 2% of BMS patients require gnatological approach. Svensson and Kaaber [4] noticed higher frequency of pain/weakness in masticatory, neck, shoulder and suprahyoid muscles in patients with BMS when compared with healthy subjects. However, Mendak-Ziółko et al. [5] did not identify parafunctions as significant risk factor for BMS which is in concordance with the study of Lopez-Jornet et al. [6].

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