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Headache attributed to tmd: analysis of risk factors and clinical implications

Luana Aparecida Jendik, Gabriela Schumacher de Camargo, Daniela Bellafronte Betoni, Daniel Bonotto, Priscila Brenner Hilgenberg Sydney

Federal University of Paraná, Curitiba, Paraná, Brazil

The term temporomandibular disorder (TMD) encompasses a set of conditions affecting the masticatory muscles, the temporomandibular joint (TMJ), and associated structures. Headache often appears as a painful comorbidity in patients with TMD. Headaches are categorized as primary and secondary, the latter being when there is a known disorder that can trigger the headache, and primary when no underlying disease is identified. Frequently, patients with TMD report headaches, and these should be properly diagnosed to avoid treatment failure. Thus, the aim of this study was to assess the risk factors associated with the presence of headache attributed to TMD in individuals with different subtypes of TMD. Sixty-eight individuals with TMD were evaluated, of whom 55 reported "pain in the temples," but only 28 were diagnosed with headache attributed to TMD according to DC/TMD criteria. Two groups of TMD patients were formed: with (n=28) and without (n=40) headache attributed to TMD. There was no significant difference in age or gender between the groups studied. The presence of the complaint of "pain in the temples" increased the likelihood of a diagnosis of headache attributed to TMD by 27.98%. Oral behaviors, such as awake bruxism and hypertrophy of the temporal muscle, were associated with the presence of this headache. No significant associations were found between other specific TMD diagnoses and headache attributed to TMD ($p>0.05$). A higher average of oral behaviors in general ($p=0.008$) and non-functional oral behaviors ($p=0.02$) were observed in individuals with headache attributed to TMD. Regression analysis showed that the presence of non-functional oral behaviors and hypertrophy of the temporal muscle significantly impacted the probability of an individual having a headache attributed to TMD ($x2= 9.76$, $p=0.007$; $R2N=0.183$). These findings highlight the importance of properly evaluating the presence of oral behaviors and their clinical signs, as their presence negatively impacts the occurrence of headache attributed to TMD and represents a risk factor for its development.