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Providing Solutions for Complex Dental Problems

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Masticatory and Cervical Muscle Tenderness and Pain Sensitivity in a Remote Area in Subjects with a Temporomandibular Disorder and Neck Disability

Silveira A, Armijo-Olivo S, et al.

J Oral Facial Pain Headache. 2014 Spring; 28(2):138-46

The purpose of this study was to compare the masticatory and cervical muscle tenderness and pain sensitivity in the hand (remote region) between patients with temporomandibular disorders (TMD) and healthy controls. Twenty female subjects were diagnosed with chronic TMD, and 20 were considered healthy. Subjects completed the Neck Disability Index and Limitations of Daily Functions in a TMD questionnaire. Tenderness of the masticatory and cervical muscles and pain sensitivity in the hand were measured using an algometer. Appropriate statistical analysis evaluated differences in muscle tenderness between groups and compared pain sensitivity in the hand between groups. Significantly increased masticatory and cervical muscle tenderness and pain sensitivity in the hand were found in subjects with TMD when compared with healthy subjects. Moderate to high effect sizes showed the clinical relevance of the findings.

The results of this study have highlighted the importance of assessing TMD patients not only in the craniofacial region but also in the neck and other parts of the body. Future studies should focus on testing the effectiveness of treatments addressing the neck and the pain sensitivity in the hand in patients with TMD.