Headache Medicine 2024, Supplement p-ISSN 2178-7468, e-ISSN 2763-6178

Headache Medicine

DOI: 10.48208/HeadacheMed.2024.Supplement.44

Relationships between craniofacial pain and disability, neck disability, and orofacial myofunctional condition in patients with temporomandibular dysfunction

Gesseany Joice Rodrigues dos Santos, Luana Maria Ramos Mendes, Luana Denadai Oliveira Menezes, Debora Bevilaqua Grossi, Gislaine Aparecida Folha

Department of Health Sciences – Ribeirão Preto Medical School, University of São Paulo, Ribeirão Preto, Sao Paulo, Brazil.

Introduction

Temporomandibular dysfunction (TMD) is a restrictive condition affecting the muscles used for chewing, the temporomandibular joint, and related structures, which impairs orofacial and cervical functions.

Objective

To investigate the presence of craniofacial and mandibular pain and disability, and to correlate these with orofacial myofunctional status in patients with temporomandibular disorders (TMD).

Methods

A cross-sectional study was conducted with a sample of 52 individuals diagnosed with TMD, aged between 18 and 40 years, of both genders. Exclusion criteria included edentulous individuals not using prostheses, those with systemic diseases, neurological disorders, recent head or neck trauma or surgery within the past year, and those unable to cooperate. Diagnosis was based on Axis I of the Diagnostic Criteria for Temporomandibular Disorders (DC/TMD). The Orofacial Myofunctional Evaluation with Scores Protocol (OMES), validated for TMD patients, assessed orofacial myofunctional conditions such as appearance, posture, mobility, and functions. Additionally, self-administered instruments included the Craniofacial Pain and Disability Inventory (CF-PDI) and the Neck Disability Index (NDI), which measures self-reported pain intensity and limitations in daily activities related or unrelated to work. Data were analyzed using mean, standard deviation, frequency, Spearman correlation for instrument scores, and simple linear regression to assess the influence of orofacial myofunctional disorder (OMES) on CF-PDI and NDI.

Results

Based on mean scores obtained (OMES: 79.45±5.95, CF-PDI: 23.65±23.60, NDI: 12.77±6.32), patients showed values above the cutoff for orofacial myofunctional disorder, exceeding the Minimal Detectable Change for CF-PDI, and indicating mild to moderate disability according to NDI. There was no correlation between orofacial myofunctional status measured by OMES and CF-PDI (-0.08), but there was negative correlation between OMES and NDI (-0.31), suggesting worse orofacial myofunctional status associated with greater neck disability. Linear regression indicated no significant influence of OMES on CF-PDI but showed a significant influence on NDI (P=0.015).

Conclusion

Patients with TMD demonstrated poorer orofacial myofunctional status, functional limitations, and craniofacial pain. There association between orofacial myofunctional status and neck disability.