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The associations of TMJ pain and bone characteristics on the activities of daily living

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ABSTRACT

The aim of this investigation was to analyze the associations of TMJ pain/discomfort and bone characteristics on the activities of daily living in a population based study. Methods: The study included 95 randomly selected participants. The impact of temporomandibular joint pain/discomfort on the daily activities was assessed by using the daily living scale by List and Helkimo (1995). The levels of serum type I collagen telopeptide fragments (P1NP), C-telopeptide crosslaps of type I collagen (CTX-1), and vitamin D (25 (OH) D) were analysed. The Mann-Whitney U-test, Spearman rank correlation coefficient (rs) were used for statistical analyses. Results: Activities of daily living were influenced by temporomandibular joint pain/discomfort to varying degrees. The degree of pain/discomfort during eating was correlated with the level of C-telopeptide crosslaps of type I collagen ($p = 0.02$) and type 1 collagen telopeptide fragments ($p = 0.04$). The females in the study had significantly lower vitamin D levels compared to males ($p = 0.04$). Conclusions: This population based study indicates that TMJ pain/discomfort exerts a significant negative influence on activities of daily living and is related to the biochemical markers of bone turnover and 25 (OH) D level. Several functions of daily activities such as social life, exercising and eating are the most disturbed.

KEYWORDS

Temporomandibular Joint; Activities of Daily Living; Bone Characteristics; Pain Assessment; Vitamin D

Cite this paper

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