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Abstract

[PIZOLATO, Raquel Aparecida](#) et al. Maximal bite force in young adults with temporomandibular disorders and bruxism. *Braz. oral res.* [online]. 2007, vol.21, n.3, pp. 278-283. ISSN 1806-8324. doi: 10.1590/S1806-83242007000300015.

Parafunctional habits, such as bruxism, are contributory factors for temporomandibular disorders (TMD). The aim of this study was to evaluate the maximal bite force (MBF) in the presence of TMD and bruxism (TMDB) in young adults. Twelve women (mean age 21.5 years) and 7 men (mean age 22.4 years), composed the TMDB group. Ten healthy women and 9 men (mean age 21.4 and 22.4 years, respectively) formed the control group. TMD symptoms were evaluated by a structured questionnaire and clinical signs/symptoms were evaluated during clinical examination. A visual analogical scale (VAS) was applied for stress assessment. MBF was measured with a gnatodynamometer. The subjects were asked to bite 2 times with maximal effort, during 5 seconds, with a rest interval of about one minute. The highest values were considered. The data were analyzed with Shapiro-Wilks *W*-test, descriptive statistics, paired or unpaired *t* tests or Mann-Whitney tests when indicated, and Fisher's exact test ($p < 0.05$). TMDB women presented lower values of MBF as compared to those presented by TMDB men and by the control group. MBF for TMDB men was similar to that of the control group. The proportion of TMDB women with muscle pain and facial/teeth/head pain upon waking up was significantly higher than that of men. Control women presented significantly lower stress scores than the others. It was concluded that MBF was reduced in TMDB women, as they presented more signs and symptoms. Men presented higher MBF values than women, but TMD and bruxism did not significantly decrease MBF. Stress was not an influencing factor for TMD and bruxism in men.

Keywords : Temporomandibular joint disorders; Bruxism; Bite force.

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