



Preliminary study for the analysis and treatment of bruxism and pain in military firefighters

Estudo preliminar para a análise e tratamento de bruxismo e dores nos bombeiros militares

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1 INTRODUCTION

Bruxism has been shown to be a multifactorial disease that, in addition to chewing disorders, is related to everyday stress and anxiety. Bruxism is more common in environments with high levels of stress. For example, in the military we see an environment in which various factors contribute to psychological imbalance in the pre- and post-disaster period (SOARES, FERNANDES and SILVA, 2021).

Its possible causes can lead to limited jaw movements, periodontal lesions, orofacial pain and headaches, as well as dental friction followed by wear, fractured cusps or whole teeth, reduced pain threshold in chewing and cervical muscles, hypertrophied masticatory muscles and temporomandibular joint disc displacement (SEABRA; GOMES; 2022).

2 OBJECTIVE

To analyze the percentage of occurrence of bruxism among Military Firefighters, their treatments and the mitigation of related diseases.

3 METHODOLOGY



The scope of the study should be a Military Fire Station in the city of Petrópolis.

The study begins with a general literature review on the subject of bruxism and work-related stress in BM.

A questionnaire will then be drawn up, with interviews, checking the level of changes complained of and which are linked to bruxism. Both in this questionnaire and in the interviews, special attention will be paid to complaints that can link results in times of normality and results in times of crisis.

Once this data has been collected, we will move on to the stage of drawing up a care protocol to prevent the occurrence of bruxism due to work-related stress.

4 DEVELOPMENT

Teeth grinding is a common and potentially destructive condition of the oral cavity that is widely addressed in dentistry, mainly due to its multifactorial etiology and controversial prevalence (MOTA *et al*, 2021).

Night bruxism is an oral habit that occurs during sleep, characterized by movements of the temporomandibular muscles, which force the tooth surfaces to come into contact with each other. The consequences of this disorder include excessive tooth wear, tooth fractures, muscle pain, inflammation and recession of the gums, pain in the temporomandibular joint, increased risk of periodontal problems, overloaded implants, loss and tangling of teeth (OHAYON, LI and GUILLEMINAULT, 2001 and NAKATA *et al*, 2008).

5 FINAL CONSIDERATIONS

After evaluations related to the study of bruxism treatment, it was concluded that myorelaxing plates have a satisfactory effect in mitigating its sequelae, and provide temporary relief for muscles, pain in the temporomandibular joint and especially occlusive degredation of the dentition. Although Oliveira and Carmo (2001) mention that myorelaxing plates hinder sleep apnea, their beneficial effects are relevant; patients who do not adapt to the plate can be offered other treatments, such as botulinum toxin (Al-Wayli, 2017; KESIKBURUN (2014); Asutay *et al.*, 2017) and tenses that reduce temporal muscle activity (MARQUES *et al*). All the proposed treatments tend to improve bruxism symptoms.



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