

# **SINTOMAS DE DESORDENS CRANIOMANDIBULARES EM BRASILEIROS IDOSOS USUÁRIOS DE PRÓTESES TOTAIS**

Symptoms of craniomandibular disorders in elderly Brazilian wearers of complete dentures

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## **Introduction**

The occurrence of edentulism among older patients is very frequent<sup>1</sup>, and alterations in the maxilla-mandibular relation may be induced during the construction of full dentures<sup>2</sup>. Such alterations can be exacerbated though the prolonged use of inadequate dentures<sup>3</sup>. Excessive wear of artificial teeth as a result of parafunctional habits (such as bruxism) and ill-fitting denture bases due to alveolar ridge resorption can further complicate such situations.

Craniomandibular disorders are also related with psychological, biological and social factors associated with ageing<sup>4</sup>. However, the literature is inconsistent in reporting on a direct correlation between ageing and craniomandibular disorder rates<sup>5</sup>.

The purpose of this study was to investigate the incidence of craniomandibular disorder (CMD) symptoms in wearers of full dentures aged 65 and over.

## **Materials and Methods**

Eighty-four patients were selected for this study and the criteria used to select the patients included being 65 or older and the use of full upper and lower dentures. The incidence of CMD symptoms in the group was evaluated by a questionnaire based on Helkimo's anamnestic index<sup>6</sup>.

## **Results and Discussion**

The average age of the 84 patients was 73,5 years (ranging from 65 to 89), 81% of which were females.

In response to the question regarding pain when opening the mouth, only 5% answered affirmatively, and the same percentage complained of TMJ luxation and a sensation of tiredness in the muscles when chewing.

Similar rates were found for pain in the TMJ area (6%), pain in the temporal muscle area (7%), difficulty to move the mandible in the morning (4%) and pain during excursive (protrusive and lateral) movements (8%).

The highest rates were found for pain in the masseter muscle area (39%) and complaints of joint sounds (24%).

This investigation revealed low rates of craniomandibular disorder symptoms in a sampling of elderly Brazilian wearers of full dentures, except for two symptoms (pain in the masseter area and complaints of articular noises).

These results are similar to those obtained by Heloe & Heloe<sup>7</sup> in a group of elderly Norwegians, 92% of which wore some kind of removable denture and no relation between the prosthetic status and related symptoms was found in that study. MacEntee et al.<sup>8</sup> also verified similar results among elderly institutionalized Canadians.

However, in their investigation of a group of elderly Swedish patients, Osterberg & Carlsson<sup>9</sup> found that 46% presented severe dysfunction according to Helkimo's anamnestic index.

Heft<sup>10</sup> suggested that the differences between target populations and the variety of methods used for investigations into craniomandibular disorders are responsible for this controversy. MacEntee et al.<sup>8</sup> considered that slight modifications in the criteria applied to identify craniomandibular disorders cause a strong impact on its prevalence rates.

Although this controversy exists and may render it difficult to analyse the data obtained from this type of investigation, it is very important to obtain epidemiological data regarding the incidence of craniomandibular disorders in elderly populations in order to plan strategies for dental treatment for this age group. Government-sponsored epidemiological data about the dental health of the elderly is inexistent in Brazil.

This paper aimed to contribute to the study of the dental health of Brazil's elderly population and to improve the dental community's knowledge about this specific population. Helkimo's anamnestic index can be used to compare our findings about this Brazilian sample with results obtained in other countries by researchers that apply this widely known craniomandibular disorder index.

## Conclusions

Based on the population studied and the methodology applied, one can conclude that the incidence of craniomandibular disorder symptoms in this sample of elderly Brazilian wearers of full dentures was low, with the exception of pain in the masseter area and noise in the joint.

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