

Demographic Characteristics of Patients with Temporomandibular Joint Dysfunction

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Abstract: Temporomandibular disorders are a heterogeneous group of conditions involving the temporomandibular joint (TMJ), masticatory muscles and related structures. The aim of the present study is to make demographic characteristics of patients with TMD. For the purposes of the present study, 152 patients in need of prosthetic treatment due to varying degrees of edentulousness were selected. The subjects of the study were 152 patients who were examined in Faculty of Dental medicine-Varna. The mean age of the patients is 60.5 years \pm 12.8 years. Very often TMS dysfunction is associated with impaired occlusion, which is directly related to tooth loss. TMS dysfunction is more common in adult patients. Females are more affected by TMJ disorders.

Keywords: TMJ, TMD, demographic characteristics, dysfunction, prosthetic treatment

1.Introduction

Temporomandibular disorders are a heterogeneous group of conditions involving the temporomandibular joint (TMJ), masticatory muscles, and related structures [1]. The main signs and symptoms include pain in the jaw muscles and/or temporomandibular joint area, sounds in the joints and limitations in the range of movement of the jaw [2].

Temporomandibular joint dysfunction includes: Costen syndrome (complex); luxation of the temporomandibular joint; temporomandibular joint pain dysfunction syndrome and others [3]. From an etiopathogenetic point of view, temporomandibular joint disorders and temporomandibular myofascial dysfunctional pain syndrome is a complex disease and causes serious disorders of the temporomandibular joints [4]. Many specialists believe that the cause of the disease is the muscular component and psychophysiological factors for the appearance and development of the syndrome [5].

2.Problem Definition

The aim of the study is to make a demographic characteristic of patients with TMD.

3.Methodology

The objects of the study were 152 patients in need of prosthetic treatment due to different degree of edentulousness. The demographic indicators studied were: age, sex and dental treatment. The patients were examined at the Faculty of Dental medicine-Varna. The duration of the study was two years (2019-2020).

Each patient is given a detailed ambulatory card created for the purposes of the study. It includes information about name, gender, age, reasons for visiting the dental office, reasons for the need for prosthetic treatment (varying degrees of edentulousness). The results were statistically processed with SPSS v.20.0.

4.Results & Discussion

For the studied period 152 patients passed through the clinical halls and University Medical Dental Center-Varna, as the average age was 60.5 years \pm 12.8 years (25 years-90 years), as the distribution is presented in Figure 1.

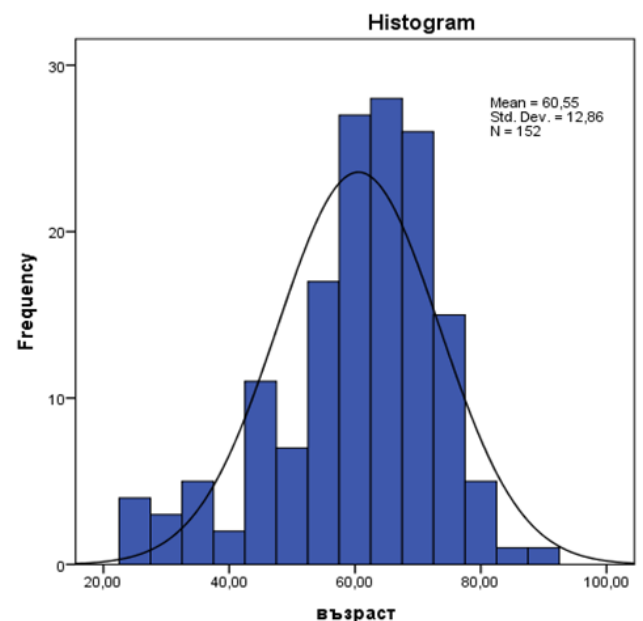


Figure 1: Distribution according to the age of the patients

About 2/3 (62.5%) of the examined patients are women. Although no significant difference was found in terms of average age, it can be said that women who underwent prosthetic treatment are younger than men (Figure 2). The average age of women is 59.4 years and that of men is 62.3 years.

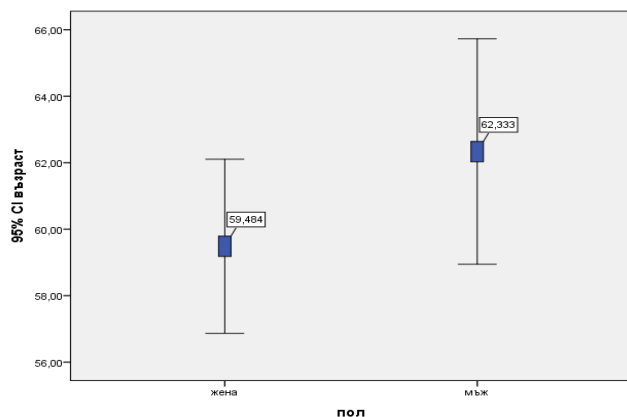


Figure 2: Mean age of the patients underwent prosthetic treatment

Very often TMS dysfunction is associated with impaired occlusion, which is directly related to tooth loss. In half of the patients the main cause of tooth loss is periodontal diseases (54.3%). In 42.9% this reason is carious lesions and their complications. And in only 2.90% of the examined patients, the cause of premature tooth loss is associated with trauma.

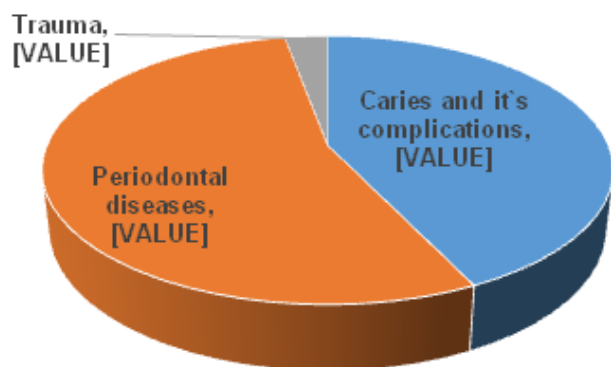


Figure 3: Distribution according to the cause of tooth loss

Our results are close to those cited in the literature on the subject, according to which the majority of patients with TMD are about 60 years old [6, 7, 8, 9]. However, according to some publications, this age is earlier-about 42 years [10, 11]. Our results also differ from those of other authors, according to whom the average age of patients with TMD is over 70 years [12, 13].

In terms of gender, the coincidence of our results with others reported in the literature is significant [14, 15].

The causes of tooth loss are three main groups-periodontal disease, traumatic injuries and caries and its complications. Periodontal disease as a major risk factor for tooth loss is confirmed not only by us but also by many other authors [16, 17]. Caries and its complications are the second main cause, which according to our research is almost as significant as periodontal disease. According to a number of other authors, the percentage is lower-about 30% [18, 19]. Trauma as a cause of tooth loss is the least significant of the three listed. However, some authors believe that the percentage is higher-about 10%, in contrast to our study, where it is 2.9% [20, 21].

5. Conclusion

Temporomandibular joint dysfunction is more common in adult patients. Females are more affected by TMJ disorders. TMJ dysfunction is often associated with occlusion problems due to edentulousness, with periodontal disease being the most common cause of tooth loss in our patients.

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