

PREVALENCE OF TEMPOROMANDIBULAR JOINT DISORDERS AMONG PARTIALLY EDENTULOUS PATIENTS

ABSTRACT

Background: Temporomandibular joint disorders (TMD) are recognized as one of the most common non-tooth related chronic Orofacial pain conditions. There are various factors that were related to TMD but the association between partial edentulism and TMD is controversial.

Aim: The aim of the study is to estimate the prevalence of temporomandibular joint disorders and its signs among partially edentulous patients. The objectives are to predict the age group and gender commonly affected with TMD, to evaluate the relationship between period of edentulousness and TMD, to evaluate the common type of partial edentulism associated with TMD.

Materials and methods: Patients visiting the department of Oral Medicine and Radiology at KSR Institute of Dental Sciences and Research were the source of data. The present cross sectional study was conducted among 460 subjects having partial edentulism for at least 8 months. The subjects were selected based on the inclusion and exclusion criteria. A self structured questionnaire was used for data collection and it was followed by clinical examination for TMD signs.

Results: The data was analyzed using SPSS software (IBM SPSS Statistics for Windows, Version 22.0). Chi-Square was used to evaluate the relationships between the prevalence of qualitative variables. Significance level was fixed as 5%. Among 460 patients, more of the female patients were partially edentulous and the most common TMD sign, clicking was present in 52.2% of the total subjects and 59% of the female patients showed clicking. The occurrence of TMD signs increased with increase in period of edentulousness. Kennedy's class II and class III were the types of partial edentulism commonly associated with TMD. TMJ tenderness on palpation was noticed in 11.7% of the patients and 21.7% of them were below 30 years of age. The muscles commonly involved were temporalis in 9.6% and masseter in 7.4% of the patients.

Conclusion: Temporomandibular dysfunction signs were present in more than half of the partially edentulous patients evaluated. The occurrence of TMD signs increased with increase in period of edentulousness and females were most commonly affected. Partially edentulous patients in the younger age group showed higher prevalence of clicking which was the frequently observed TMD sign.

Keywords: Temporomandibular Joint, Temporomandibular disorder, Partial edentulism.