

Abstract:

Introduction: having no teeth can both physically and mentally decrease patients' quality of life; implant-based overdenture is a trusted, predictable, and successful treatment for none dental jaws, especially mandibular teeth. The aim of this study was to evaluate the quality of life of patients before and after using mandibular implant-based overdenture on the basis of OHIP-14 questionnaire.

Materials and Methods: In this descriptive cross-sectional study, 18 patients were examined in two private offices in Ardabil (9 females, 9 males) with complete mandibular denture who were dissatisfied with them. Patient conditions were evaluated for implant treatment after performing the procedures of complete diagnostics including radiography, diagnostic casts, etc... . The treatment steps were explained to the patient after confirming the need for overdenture treatment. At this stage, prior to initiating treatment, the OHIP-14 questionnaire was administered to the patient for evaluation of the various aspects of the patient's satisfaction (complain) with the existing denture, and then patients were treated by implant based overdenture. Six months after the operation, the OHIP-14 questionnaires were administered again. The raw data obtained in both phases were analyzed by SPSS software (version 22) using dependent t-test and Wilcoxon test. An acceptable error level of 5% was considered.

Results: The results showed that the mean and standard deviation of patients' quality of life before using mandibular overdenture was 2.31 ± 20.05 and after using mandibular implant overdenture was 6.43 ± 52.05 which was statistically significant ($P < 0.05$). Also, mandibular implant-based overdenture reduces severe pain, worry and discomfort, mouth or denture embarrassment during 6 months of use ($P < 0.05$); and mandibular implant-based overdenture Improves the sense of taste and ultimately increases the satisfaction of patients.

Conclusion: Based on the findings of the present study and past studies, mandibular implant-based overdentures significantly increase patient satisfaction in a long-term use and thus improve quality of life compared to patients with conventional prosthetic.

Keywords: Quality of Life, Implant-based Overdenture, OHIP-14 Questionnaire