

WHAT IS AFTER CONVERSION OF UNMODIFIED KENNEDY CLASS II INTO KENNEDY CLASS III CASES?

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ABSTRACT

Statement of the problem: After conversion of unmodified Kennedy class II partially edentulous cases into Kennedy class III by single implant placed in the lower first molar area, does restoration by unilateral clasp retained side plate or precision attached one affect the masticatory performance of the patient or not?

Purpose: This study was done to investigate the alteration of the electromyographic.(EMG) activity of the masseter muscles following the use of two different designs of implant-tooth borne unilateral partial denture.

Materials and methods: Within-subject comparison of unilateral attachment retained partial denture(ARPD) and clasp retained partial denture (CRPD) was done. The EMG activity was measured before denture insertion, two weeks (2w), two months (2m) and four months (4m) after insertion of the precision attached partial denture. Then the clasp retained side plate was inserted and the EMG activity was recorded at the same time intervals for masseter muscles of both intact and restored sides.

Results: Patients expressed satisfaction after wearing their dentures and can comminute all types of food. The results revealed higher masseteric EMG activity with the use of precision attached partial denture than with the use of clasp retained side plate.

Conclusion: The masticatory process with the two suggested prostheses was effective. While the precision attached partial denture gives higher masseteric EMG activity approached the intact side of the same patient after four months of denture use in comparison to the clasp retained side plate.

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