

Radiographic evaluation of tooth supported versus tooth implant supported partial denture prosthesis. Egyptian Dental Journal, July, 2001.

Abstract:

Partial denture continues to be an excellent treatment modality for restoration of partial loss of the teeth and supporting structures. The success of osseointegrated concept tempted many dentists to apply its principle in the treatment of partially edentulous patients. Objective: to compare radiographically in-between tooth-implant supported (Group I) and the conventional tooth supported (Group II) partial dentures regarding their effect on the supporting oral structures. Method: sixteen female patients classified into two equal groups. Intra-oral direct digital radiographs were used to assess the marginal bone height and bone density around the natural and fixture abutments as well as around the edentulous span. Results: No significant difference in bone density distal to anterior abutments and mesial to the posterior abutments in the two studied groups. While a decrease in bone height was greater distal to the anterior abutments and mesial to the fixture abutments of group I than of group II. But with no statistical difference in-between. Also, the edentulous ridge areas showed minimum alveolar ridge reduction in the two studied groups. Conclusion: Tooth-supported removable partial dentures showed better effect on the hard supporting structures, however a combination of tooth and implant in distal extension cases to support removable partial denture is an accepted treatment modality.