Technical failure rates of double crown-retained removable partial dentures.

Behr M, Hofmann E, Rosentritt M, Lang R, Handel G.

Department of Prosthodontics, University of Regensburg, 93042 Regensburg, Germany.
Michael.Behr@klinik.uni-regensburg.de

Removable partial dentures (RPD) can be retained using conical crowns or parallel-sided telescopic double crowns. The purpose of this study was to evaluate and compare the technical failure rate of the two retainer systems. One hundred seventeen dentures made by dentists of the medical school were included. Seventy-four RPD were retained with parallel-sided crowns (n = 251) and 43 with conical crowns (n = 160). Following the medical report follow-ups from January 1992 to December 1998, technical RPD failures were noted and analyzed. Technical problems occurred during the observation time in 48.8% of the conical retained dentures and 34.2% of the parallel-sided retained dentures. In both cases, loss of cementation was most frequently noted, while loss of the facings occurred only with conical crowns. Other technical failures did not depend on the type of retainer system used. These were most frequently problems with the denture base, e.g., fracture of artificial teeth or the metal framework. We conclude that there were different technical failures of both double crown retainer systems. These problems were not insignificant in number but treatable.

PMID: 11218506 [PubMed - indexed for MEDLINE]