Analysis of veneer failure of removable prosthodontics.

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Abstract

Gerodontology 2010; doi: 10.1111/j.1741-2358.2010.00394.x Analysis of veneer failure of removable prosthodontics ABSTRACT: Objective: This retrospective study aimed to analyse the failure rate of the facings of double crown-retained dentures. Materials and methods: The clinical reports of 575 patients, who received double crown-retained removable dentures with a total of 1807 double crowns between 1984 and 2007, were included in the study. The 575 prostheses were attached to telescopic crowns using a friction fit (FF; n = 1999), conical crowns (CC; n = 61), or parallel-sided telescopic crowns with a clearance fit (CF; n = 315). Survival probabilities for the veneers were investigated using the Kaplan-Meier method; Cox regression analysis was carried out to determine the influence of the double crown used for retention, type of antagonist, and localisation. Results: Veneer failure occurred in 7.0% of FF, 27.9% of CC, and 4.4% of CF. The risk of veneer failure was 2.3 times higher for CC than for FF (p = 0.042); no significant differences were found between CF and FF (p = 0.363). No significant influences on the localisation of the denture (p = 0.534) or the type of antagonist (p = 0.341) were found. Conclusion: CC-based double crowns have a higher risk of veneer failure than FF and CF, which may be due to high tensile stresses occurring in the cervical area of their outer copings.

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