

OP-4

Tooth Supported Overdenture vs Stud Retained Overdenture: A Case Report

Hazira M Yusof

Department of Prosthodontics, Faculty of Dentistry, Universiti Sains Islam Malaysia
Pandan Indah, Malaysia

Corresponding author: hazirayusof@usim.edu.my

ABSTRACT

Residual ridge resorption is a continuous process that occurs throughout life. Severely resorbed ridge is classified as a technically difficult case due to the limited structural availability that is integral for the stability of a denture. Overdenture has the advantages of preservation of alveolar bone while providing support and stability to the prosthesis. A 67-year-old lady came to the clinic with a complaint of a loose upper and lower denture. Intraorally patient presented with discoloured and severely attrited upper anterior teeth and worn-down stud attachment on teeth 33 and 43. The treatment plan was to construct a tooth supported partial overdenture for the upper and lower stud retained overdenture. This treatment was chosen due the severely attrited upper anterior teeth and owing to the success of previous stud attachment on the lower overdenture. Stabilization of caries was done and patients' upper anterior teeth were contoured leaving 2 mm of coronal height for the upper partial overdenture abutment. All treatment stages were done in the same manner as the conventional denture, however, during the try-in stage it is crucial to assess the occlusal vertical dimension to ensure adequate interocclusal space for the tooth overdenture and stud attachment. After assessment of space, old studs on teeth 33 and 43 were removed. Preparation of chamfer margin was done and an impression was taken for the construction of new studs. After cementation, another impression was taken for denture processing and stud housing pick-up. During review visit, patient was happy and functioning well while the stability and retention of the denture was greatly improved. Overdenture is a simple and cost-effective treatment, an alternative to implant retained denture while providing better retention than conventional denture.

Keywords: overdenture, severe ridge resorption, stud attachment