Evaluation of load transmitted by distal-extension removable partial denture utilizing different impression techniques

This study was carried out to evaluate the stresses beneath two types of dentures; once constructed according to the functional method using the fluid wax, and the other according to the selective pressure impression technique using the rubber base impression material. The findings showed that stresses beneath the denture constructed according to the functional impression method using the fluid wax, was less than that under the denture constructed according to the selective pressure impression method using rubber base. Although the difference in stresses between both types of dentures was highly significant, the mucosal cytological changes beneath both dentures were merely significant. The functional impression technique using the fluid wax could be the impression of choice in special ridge cases to minimize the load induced by the partial denture. The study came with a contact factor that facilitates the use of transducer principle without the need for the calibration procedure and curve, provided that the dimension of the transducer cell is the same as that used in this study.