

Relationship between the thickness and strength of the resin base on the root caps-Examination of using the high impact resistance denture base resin-

K.Sakurai, K.Ohtani, E.Nagai, S.Nakabayashi, A.Tateno, T.Ishigami

Department of Partial Denture Prosthodontics, Nihon University School of Dentistry

Abstract

Fracture of overdenture is greatly involved in the thickness of the resin base on the root caps. However, it is often difficult to have the thickness on the top of root caps. Therefore, it was evaluate the denture base strength influence of thickness of the resin base on the top of root caps. It was compare in the two kinds of denture base resin which are the high impact resistance and conventional denture base resin.

Specimens made of heat curing resin which were two kinds of denture base resin. Then each of the denture base resin was institute thickness to 2.5, 3.0 and 3.5 mm. The bending strength of three and four point bending of the specimens were measured at a crosshead speed of 5 mm/min in a universal testing machine.

There were significant difference in the thickness of specimens and in two kinds of resin. This result indicate that the high impact resistance denture base resin may be useful as a material used for the overdenture.