Abstract.

The frequent problems that occur with denture bases is fracture, that caused by such factors as poor fitting of the denture base, poorly balanced occlusion and other problems after years of used.

(30) specimens of acrylic resin were prepared and divided into (3) groups according to curing treatment and types of acrylic resin denture base as follow: (10) specimens made from heat cured acrylic without metal wire as a control group, (10) specimens made from cold-cured acrylic resin without metal wire, and (10) specimens made from cold – cured acrylic resin with metal wire.

The results showed that, the transverse strength of cold- cured acrylic resin specimens with metal wire were statistically significant different when compared with the two other specimens of heat cure acrylic resin [control group] without metal wire and cold-cure acrylic resin without metal wire.