

***DIFFERENCE BOND STRENGTH OF ADHESIVE ON FIXED
RETAINER USING MULTISTRAND WIRE 0,0195" AND 0,010" x 0,028"***

ABSTRACT

Objectives : To determine bond strength of adhesive on fixed retainer using multistrand wire 0,0195 and multistrand wire 0,010 x 0,028, and to determine Adhesive Remnant Index (ARI) score.

Materials and methods : Two different multistrand wire were used, 0,0195 and 0,010 x 0,028. To test bond strength, ten pairs of incisors were embedded in acrylic blocks and divided in two groups. A 15mm length of wire was bonded to lingual surface of each pairs incisors using adhesive. A vertical force was applied to the interdental wire using autograph. To assess Adhesive Remnant Index (ARI) score, the failure sites were evaluated by Scanning Electron Microscope.

Results : Bond strength were significantly different between two groups. ($p < 0,05$). Bond strength was significantly higher on fixed retainer using multistrand wire 0010 x 0,028. Adhesive Remnant Index (ARI) score were not significantly different between two groups ($p > 0,05$).

Conclusion : Multistrand wires 0,010 x 0,028 are suggested for use in fixed retainer.

Keywords : fixed retainer, bond strength, Adhesive Remnant Index (ARI).