ABSTRACT

**Background**: In bridge processing, tooth preparations is needed. At abutment preparation, some dentin tubules will open that potential entry of chemicals and microorganisms into the pulp. To prevent this, the dentin tubules have to be closed. Recently has been introduced casein materials-amorphous calcium phosphate phosphopeptides that helps localize the availability calcium and phosphate ions that can reduce tooth sensitivity. **Purpose**: The purpose of this study was to determine the effectiveness of CPP-ACP material (GC Tooth Mousse) in increasing the shear bond strength between resin cement to dentin. **Material and method**: Fourteen maxillary first premolar teeth that had been extraction and caries-free. Every teeth is prepared until reach the dentin. Put it to the mold then fixed the teeth with self-cured acrylic. All of the teeth divided into two groups, group A (coated with CPP-ACP) and group B (without coated CPP-ACP). In group A material coated CPP-ACP for 3 minutes and then rinsed with water spray and air. Then applied the self-adhesive resin cement (Multilink), while in another group applied the self-adhesive resin cement directly after the teeth is prepared. **Result**: There is significant differences between each group, \( p = 0.02 \) (\( p<0.05 \)). **Conclusion**: The appliance of CPP-ACP effective in increasing the shear bond strength between resin cement to dentin. **Keywords**: Dentin, CPP-ACP, self-adhesive resin cements, shear bond strength