ABSTRAK

Background. Today, there is still no study on distortion of SLOB technique, therefore it was needed to examine horizontal distortion by using innovative tool with modified film holder as the guide in SLOB technique particularly on maxillary first premolar. **Purpose.** To know the difference of horizontal distortion mesial and distal with 20 degrees angulation. 

**Methods.** Using analytical observation, the number of samples were 24 people, maxillary permanent first premolar teeth covered with wax and 10 mm clasp, then the tooth photographed with the periapical projection using modified film holder in SLOB technique at the angle 20 degrees on mesial and distal, then clasp measured using the term Boley Gauge to know its distortion. **Result.** Mesial’s angulation have 2.361 mm of distortion and distal”s angulation have 2.295 mm of distortion. There was no-significant difference between the use of the film holder modification techniques SLOB angulation 20 degrees to mesial and distal on permanent maxillary first premolar. **Conclusion.** Angulation of 20 degrees to mesial and distal revealed a no-significant distortion and suggested this technique to not use in qualitative study.

**Key words :** SLOB technique, a modification of the film holder, distortion, maxillary first premolar