

ABSTRACT

Microleakage in the resin composite restorations could trigger sensitivity to the teeth that restored. The material of restoration could adhere well to the cavity because of dentin bonding adhesive system. Adhesive system has two groups, there were total etch and self etch group. The purpose of the resource was to compare the microleakage due to the use of different two type of dentin bonding adhesive system in the composite bulkfill.

In this study, was an experimental laboratory in vitro with the sample was ten premolar teeth. The sample was divided two groups randomly, each group has five teeth, the first group used fifth-generation dentin bonding adhesive system while the second group used seventh-generation dentin bonding adhesive system. Each group was given the same treatment that was shaped cavity of clas I and carried restorative composite resin by bulk technique.

The mean of microleakage in the first group (fifth-generation dentin bonding adhesive system) was 1,45 while in the second group (seventh-generation dentin bonding adhesive system) was 1,7. Based on T-Test showed that there was not different significance between I (fifth-generation dentin bonding adhesive system) and II (seventh-generation dentin bonding adhesive system) group ($p > 0,05$).

The conclusion showed that there was not different significance between microleakage in fifth-generation dentin bonding adhesive system and seventh-generation dentin bonding adhesive system.

Keyword : Microleakage, Composite Resin Bulkfill Type, Fifth-Generation Dentin Bonding Adhesive System, Seventh-Generation Dentin Bonding Adhesive System.