### Title: The effect of storage and type of adhesive resin on microleakage of enamel margins in class V composite restorations

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### Abstract: Aim and introduction: Study compared microleakage of enamel margins in class V cavities restored with two types of adhesives at three time intervals.

**Methods and materials:** A total of 120 bovine incisors were randomly divided into two groups (groups 1 and 2) according to the type of the adhesive used (dentin and enamel adhesives, respectively). Then, each group was divided into three subgroups (n = 20) (subgroups 1 to 3: evaluation of microleakage at 24 h, 6 months and 12 months intervals after restoration, respectively). Subsequent to restoration and immersion in fuschin, the teeth were sectioned and microleakage was evaluated. Kruskal-Wallis and Mann-Whitney U tests were used for comparison of microleakage of the three subgroups in each group and for two-by-two comparisons, respectively. Mann-Whitney U test was used for comparison of microleakage between enamel and dentin adhesives at each time interval.

**Results:** There were significant differences in the microleakage between the three time intervals in both adhesives (p < 0.001). The differences in microleakage between the two adhesives were significant at 12 month interval (P = 0.02), whereas there were no significant differences in the microleakage at other intervals between the two adhesives (p > 0.05).

**Conclusion:** Dentin adhesive showed a better durability of the bond to enamel when compared to enamel adhesive subsequent to 12 months of storage in water.

### Keywords: Enamel adhesive resin, dentin adhesive resin, microleakage, water storage

### Presentation: Poster