and 3. Throughout the cleaning and shaping procedures, apical patency was maintained by recapitulation with no. 10 K-file. All teeth were instrumented in same manner by a single operator. The canals were dried with paper points and obturated with laterally condensed gutta-percha and Tubliseal (zinc-oxide eugenol based) root canal sealer.

The teeth were randomly divided into 3 groups of 10 each. They were as below:

Group 1- The access cavity was restored with composite resin (Spectrum TPH, Dentsply Detry, GmbH, Konstanz, Germany) according to manufacturer’s instructions.

Group 2- The access cavity was restored with resin modified glass ionomer cement (Vitremer, 3M Dental Products, St. Paul, USA) following manufacturer’s instructions.

Group 3- Control group- no restorative material was placed in the cavity.

Radiographs were made to verify the quality of obturation. All specimens were stored in 100% humidity for 48 hrs. At this stage, teeth in the control group were further subdivided into two groups of 5 each. The five positive controls received two coats of nail polish, leaving 2mm all around the restoration margins. The five negative