

***The Effectivity of Irrigation Solution NaOCl 2,5% and EDTA 17%
on The Sealing Ability of Resin Paste***

ABSTRACT

Background. Root canal irrigation seeks the elimination of bacteria and its product from the root canal. If debris is left in the root canal, it can prohibit adaptation between obturation material and root canal wall. Therefore, it can decrease the sealing ability of obturation material. **Aim.** To assess the effectivity of NaOCl 2,5% and EDTA 17% on the apical sealing ability of resin obturation paste. **Methodology.** The roots of 18 human mandibular premolar teeth were selected and the root canal was prepared using a conventional technique. Samples were irrigated with NaOCl 2,5%, EDTA 17%, and sterile aquadest as control group. Samples were filled with gutta-percha and TopSeal. Samples were soaked in methylene blue 2% for 48 hours to measure the depth of micro leakage. **Results.** The mean apical leakage after irrigation with NaOCl 2,5%; EDTA 17%; and sterile aquadest in sequence were 0,92 mm; 3,6 mm; and 8,08 mm. **Conclusions.** NaOCl 2,5% has the less depth of micro leakage than EDTA 17%. However, the depth of micro leakage can not picture the exact sealing ability of resin paste due to some factors.

Keywords. Irrigation Solution; NaOCl 2,5%; EDTA 17%; Sealing Ability; Resin Paste