

# A STUDY OF RADIOPACITY OF SELECTED TYPES OF CAVITY LINING MATERIALS

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## ABSTRACT

**Objective:** This study was undertaken to compare the radiopacity of selected cavity lining materials as it is considered one of their most important clinical requisites.

**Methods:** This study compared the radiopacity of seven cavity lining materials (2 resin modified glass ionomer based materials, 2 calcium hydroxide based, one polyacid modified composite resin, one zinc oxide based and one hydroxyapatite reinforced material. Occlusal radiographs were taken for selected materials and aluminum step wedge (control material), and then scanned to form computer images which were then analyzed following gray scale level analysis method.

**Results:** All tested liners were less radiopaque than equivalent thickness, 2mm of aluminum step wedge (equivalent to radiopacity of enamel) except for zinc-oxide based material which showed exceptionally radiopacity values higher than that of control specimen.

**Conclusion:** All tested materials were found to have variable levels of radiopacity, some of them are comparable. Radiopacity factor should be considered when selecting these materials as liners or bases.

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