**Title:** Appropriate restorative materials for reinforcing permanent immature anterior teeth, root filled using MTA: A review

**Authors:** Kavoos Ghajar* (1), Sahel Marjani(2), Pooya Olyaee(3), Seyyed Amin Mousavi(4)

**Abstract:** Objectives: This review considers the current status regarding the selection of appropriate restorative materials for reinforcing weak immature anterior teeth following root canal treatment using MTA.

Abstract: Pulpless immature anterior teeth have a higher susceptibility to cervical root fracture following root canal treatment. The open and sometimes divergent apical morphology and weak root dentine wall makes endodontic procedures challenging, and presents restorative problems. In these teeth, thin and weak dentine walls, a large pulp chamber and, in many cases, fractured coronal structure, there is a risk of cervical fracture during or following root canal treatment. The objective of the final restoration is to provide an effective coronal seal, reinforce or maintain the strength of the tooth, and to maintain the tooth in an aesthetic and functional relationship with the adjacent and opposing teeth. Effective coronal seals provided by sound restorations play a significant role in the outcome of endodontic treatment. Currently, the trend is towards selection of MTA as the apical filling material for immature teeth. Composite resin restorations, resin reinforced glass ionomer cement, root canal posts, monoblock root filling systems, MTA and various combinations have all been used to reinforce the thin walled canals of immature teeth.

Conclusions: Reducing the amount of coronal root canal filling and replacing it with Composite Resin restorations lead to diminish coronal leakage, thereby contribute to endodontic success.

**Presentation:** Poster