

Clinical assessment of mineral trioxide aggregate as direct pulp capping in young permanent teeth

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Abstract

Carious pulp exposure in permanent molars of children is a common incident. Mineral trioxide aggregate is a new material that possesses numerous exciting possibilities for pulp therapy.

Aim: The purpose of this study was to evaluate the efficiency of MTA as a direct pulp capping agent in young permanent teeth. **Methods:** Thirty asymptomatic permanent molars with pulp exposure were treated by pulp capping using MTA. At each recall (6, 12, 18 and 24 months), the teeth were assessed clinically, through pulpal sensitivity tests, as well as radiographically to evaluate periapical healing.

Results: None of the cases reported spontaneous pain at the 6 months follow up and the pulp showed signs of vitality and absence of periapical radiolucency. At 24 months, the clinical and radiographic success rate was 93% with evidence of continued root growth.

Conclusion: Pulp capping with MTA is recommended for teeth with carious pulp exposure especially immature teeth that possess high potential for healing.