

PULPOTOMY IN IMMATURE PERMANENT TOOTH WITH MOLAR INCISOR HYPOMINERALIZATION

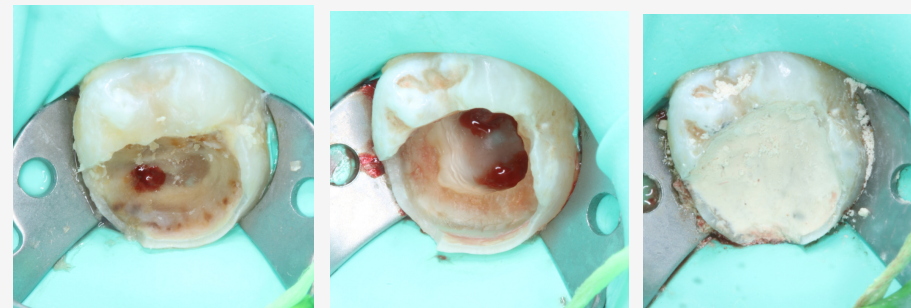
Valle Galindo KG, Pedroza Uribe IM, Yáñez Acosta MF, Bayardo González RA, Robles Bermeo NL.
University of Guadalajara, University Center of los Altos, Division of Pediatric Dentistry.

INTRODUCTION

Molar incisor hypomineralization is a systemic developmental characterized by a defined opacity; a defect in the quality of enamel caused by a reduction in inorganic enamel components affecting one or more permanent first molars often associated with the permanent incisors. Occasionally suffering posterior rupture enamel, this posteruptive breakage exposes the dentin and the tooth becomes vulnerable to rapidly progressing caries. Pulpotomy is considered for the treatment of teeth with irreversible pulpitis when the infection is very advanced. The anti-inflammatory properties of the new generation tricalcium silicate materials maintain healthy pulp tissue by promoting the reversal of inflammation.

CASE REPORT

An 9 year old male patient presented to the clinic of the University of Guadalajara, with persistent pain on chewing in tooth 36. During intra oral examination deep cavity with exposed dentin was observed, ICDAS code 6, radiographically it appeared to be pulp communication and open apices. Under local anesthesia and in absolute isolation, the cavity was cleaned with a dentin spoon, after pulp exposure a partial pulpotomy was performed, disinfected with a 2% chlorhexidine cotton swab and obturated with biodentine, it was kept under observation for 15 days and it was restored with a steel crown cemented with glass ionomer type 1 as there were no symptoms, radiographic control was continued until 6 months after the apices were closed.



Pulp exposure and treatment.

CONCLUSION

Biodentine was the material of choice for successful apicogenesis, as it allowed total root formation after 6 months while preserving pulp vitality.



Fig 1. Initial radiography.



Fig 2. Pulp treatment.



Fig 3. Restoration steel crown.



Fig 4. Root formation.

REFERENCES

1. Almulhim B. Molar and Incisor Hypomineralization. JNMA; journal of the Nepal Medical Association. 2021;59(235):295-302.
2. Padavala S, Sukumaran G. Molar Incisor Hypomineralization and Its Prevalence. Contemporary clinical dentistry. 2018;9(Suppl 2):S246-s50.
3. Zafar K, Nazeer MR, Ghafoor R, Khan FR. Success of pulpotomy in mature permanent teeth with irreversible pulpitis: A systematic review. Journal of conservative dentistry : JCD. 2020;23(2):121-5
4. Ather A, Patel B, Gelfond JAL, Ruparel NB. Outcome of pulpotomy in permanent teeth with irreversible pulpitis: a systematic review and meta-analysis. Scientific reports. 2022;12(1):19664.