Use of mineral trioxide aggregate in the treatment of horizontal root fractures of immature permanent teeth: Report of cases

Fatma Masmoudi Baccouche and Zied Baccouche
University of Monastir Dental School, Tunisia

Radicular fractures in immature permanent teeth are uncommon injuries among dental trauma comprising 0.5-7% of the cases. Fracture occurs most often in middle third of the root and rarely at the apical third. Mineral trioxide aggregate was introduced to dentistry as a root end filling material. It has been advocated for filling root canals, repairing perforations, pulp capping and root end induction. The present paper reports a clinical case of a horizontal radicular fracture located between the middle and apical third of upper central incisor treated with mineral trioxide aggregate with a 6 years follow-up. The use of MTA in the treatment of horizontal root fractures is not a routine application; however, MTA positively affected the healing of fractured teeth after 6 years, so it may be concluded that it can be used clinically in the treatment of horizontal root fractures.

Biography
Fatma Masmoud is graduated from Monastir University (Tunisia) since 2001, she has begun teaching in 2007, pediatric dentistry and oral prevent at the dentistry school of Monastir. She conducted many studies about oral health in children. She published some papers about pediatric dentistry. She is member of Tunisian section of IADR and of Dento-facial biological and clinical approach laboratory. She is secretary of Tunisian Association of Pediatric Dentistry.

Notes: