

extraction was entirely avoided. It would generally be anticipated that a lower third molar would remain in its position with the risk of paraesthesia remaining if extraction were considered at a later date. This degree of movement of a third molar seems highly unusual and no reports of third molars erupting in this manner could be identified. Regardless of this case being isolated, clinicians must consider that, even if removal of a tooth complies with NICE guidelines, it may not be necessary to remove at that stage in the absence of symptoms. For motivated patients with good oral hygiene, monitoring should always be considered as a treatment option.

References

1. National Institute for Clinical Excellence. *Guidance on the Extraction of Wisdom Teeth*. London: NICE, 2000. Available at: www.nice.org.uk/guidance/ta1 (Accessed November 2015).
2. Hill CM, Walker RV. Conservative, non-surgical management of patients presenting with impacted lower third molars: a 5-year study. *Br J Oral Maxillofac Surg* 2006; **44**: 347–350.

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Treatment of complicated crown or crown-root fracture: some additional information

The article entitled *Dental Trauma Part 2: Acute Management of Fracture Injuries* in the December 2016 issue of *Dental Update* was an interesting read.¹ Indeed, it is very well summarized and highlights the acute management of various tooth fractures associated with trauma. The presentation of information together with a series of illustrations describing various injuries and their management is impressive. However, I would like to highlight an important fact about Cvek pulpotomy which should have been mentioned in the article. Cvek pulpotomy can be carried out in immature permanent teeth irrespective of the time elapsed since the injury, provided that the tooth is still vital.² However, Cvek pulpotomy proves to be very successful

only if carried out within 24–48 hours following injury to young permanent teeth with completely formed roots,² although some success has been achieved when teeth with traumatic pulp exposure for as long as four days were treated by Cvek pulpotomy. However, the success rate is greatly reduced after 48 hours following traumatic pulp exposure.^{2,3} Nevertheless, every attempt should be made to preserve the vitality of young permanent teeth as it will result in continued dentine deposition in the cervical area, thus strengthening the tooth.⁴ Besides, as already mentioned in the article by Djemal *et al*,¹ upon pulp excavation, if healthy pulp tissue cannot be reached up to the cervical level, root canal treatment should be carried out. This is because the cell rich coronal pulp tissue is more likely to facilitate healing after Cvek pulpotomy as the radicular pulp is more fibrous and unicellular.⁴ Hence, the judgement of whether to perform Cvek pulpotomy or pulpectomy on a young permanent tooth with completely formed roots eventually lies with the treating physician.

In addition to Cvek pulpotomy, an additional treatment option is direct pulp capping which was not mentioned in the article.¹ Direct pulp capping can be performed instead of pulpotomy if the pulp exposure is pin point and the treatment is carried out within one hour following injury.⁴ Furthermore, the importance of isolation when carrying out direct pulp capping or Cvek pulpotomy cannot be overemphasized. In the article by Djemal *et al*,¹ the use of rubber dam was not mentioned. Moreover, the illustrations also do not depict the use of rubber dam while Cvek pulpotomy was carried out. Ideally, during any form of treatment involving the pulp tissue, use of rubber dam is mandatory to ensure long-term success.

References

1. Djemal S, Singh P, Polycarpou N, Tomson R, Kelleher M. Dental trauma Part 2: Acute management of fracture injuries. *Dental Update* 2016; **43**: 916–926.
2. Cvek M. A clinical report on partial pulpotomy and capping with calcium hydroxide in permanent incisors with

complicated crown fracture. *J Endod* 1978; **4**: 232–237.

3. Fuks AB, Chosack A, Klein H, Eidelman E. Partial pulpotomy as a treatment alternative for exposed pulps in crown-fractured permanent incisors. *Dent Traumatol* 1987; **3**: 100–102.
4. Bimstein E, Rotstein I. Cvek pulpotomy – revisited. *Dent Traumatol* 2016; **32**: 438–442.

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Splinting traumatic dental injuries

The article entitled *Dental Trauma Part 1: Acute Management of Luxation/Displacement Injuries Management* was informative and provided readers with a comprehensive understanding of the management and sequelae of such injuries.¹ Interestingly the authors only mention splinting with composite and 0.018" stainless steel wire. The online dental trauma guide alludes to other possible splints to use in such instances, 'acid-etch flexible resin splints, acid-etch-wire composite splints, acid-etch composite nylon line splints, acid-etch orthodontic wire splints and titanium trauma splints'.²

There doesn't appear to be any clear consensus on the exact type of splint to use according to the IADT trauma guidelines and online *Dental Trauma Guide*.^{3,2} Clinicians have their own preferences, depending on their experience, availability for specialist input, place of work or department, availability of materials and availability of nursing staff for assistance. Having worked in Accident and Emergency, as well as on a Paediatric Dental Department, I have treated numerous patients with traumatic dental injuries requiring immediate management. The splints of choice proving to be the most effective in the units where I have worked have been constructed using orthodontic brackets and 0.014" NiTi wire. There are a number of advantages to using orthodontic brackets; ease of placement (especially if working single handily in A&E), the ability to encourage orthodontic movement