



## A Mouthful of Puck

Rob Green, MD, FRCPC

### Dean's presentation

- Dean, 24, presents to the emergency department (ED) after being struck in the mouth by a puck during a hockey game.
- He did not lose consciousness.
- Dean only complains of a sore and bleeding mouth.
- His front tooth has been knocked out, but he has brought it to the ED in a bag of ice.

For more on Dean, turn to page 4.

### Questions & Answers

#### 1. How should avulsed or fractured teeth be transported?

Avulsed or fractured teeth should be handled as little as possible and temperature extremes are to be avoided. Acceptable transport mediums include normal saline and milk, in addition to commercially available products.

#### 2. What types of dental injuries are commonly seen in the ED?

Common dental trauma seen in the emergency department include:

- fractures,
- concussions,
- subluxations and
- avulsions.

Dental fractures are commonly classified by the Ellis classification (Table 1).

Table 1

### Ellis classification of dental fractures


	Location of Fracture	Clinical Clue	Treatment
<b>Ellis 1</b>	Enamel only	No discolouration of fractured area	Smooth sharp corners
<b>Ellis 2</b>	Involves dentin	Dentin is creamy/yellow in colour	Cover exposed dentin; dentistry referral
<b>Ellis 3</b>	Involves pulp	Blood is usually present	Cover exposed dentin; dentistry referral

### 3. *Dean has an avulsion of his tooth. How should this be treated in the ED?*

Avulsed teeth should be reimplanted as soon as possible, ideally within two to three hours. Care should be ensured to minimize handling of the tooth as much as possible, during transport and while attempting reinsertion.

Aggressive scrubbing will disrupt existing periodontal fibers and should be avoided; however, the tooth should be thoroughly rinsed with sterile saline. After irrigating the socket with sterile saline, reimplantation with firm pressure is usually successful. Care to ensure the proper positioning of the reimplanted tooth is essential to the long-term viability and for cosmetics.

### 4. *What's next?*

Commercial dental splint material may be used as a temporary stabilizer until followup with a dentist. Although the use of antibiotics is controversial, a five-day course of oral penicillin is recommended. 

### Back to our patient

- Dean was discharged from the ED with a dental splint and analgesics.
- He was assessed by his dentist the next morning and his splint was modified.
- Seven days later, he was reassessed by his dentist and, after splint removal, he was assured that his tooth was healthy and viable.

*This department covers selected points to avoid pitfalls and improve patient care by family physicians in the ED. Submissions and feedback can be sent to [diagnosis@sta.ca](mailto:diagnosis@sta.ca).*

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