**Dental Injuries**

**GOALS:**

1. Become familiar with normal dental anatomy of a child.
2. Know various dental injuries that occur in children.
3. Be able to recognize dental emergencies in the outpatient setting.
4. Teach the importance of early dental referral for preservation of teeth.
5. Be able to give advice to parents about prevention of dental injury

**OBJECTIVES:**

1. Demonstrate normal dental anatomy with the use of terminology and pictures.
2. Describe stages of teeth and typical age ranges:
   1. Primary
   2. Secondary
3. Elaborate on various dental injuries:
   1. Subluxation/intrusion/extrusion injuries
   2. Tooth avulsion
   3. Tooth fractures of varying degrees
   4. Dental abscess
4. Discuss treatment for dental injuries.
5. Identify the indications for referral to dentistry, especially in the case of dental emergencies.
6. Provide advice to parents about:
   1. Protection during sports participation
   2. First steps in case of dental injuries and emergencies before reaching the dentist office or emergency room.

**INSTRUCTIONAL STRATEGY:**

1. Lecture
2. Case presentation

**RESOURCES:**

1. <http://www.3dmouth.org/4/4_intro.cfm>
2. <http://www.dentalwisdom.com/training/anatomy/traininganatomy1.html>
3. <http://www.aae.org/patients/Your_Teeth/Traumatic_Dental_Injuries.aspx>
4. <http://www.dentaltraumaguide.org/>
5. <http://www.mouthhealthy.org/>

**EVALUATION STRATEGY:**

1. Post-test
2. Case management discussions

**REFERENCES:**

1. See Resources, especially [www.dentaltraumaguide.org/](http://www.dentaltraumaguide.org/)
2. Shusterman S. Pediatric Dental Update. *Pediatrics in Review* 1994; 15: 311-318.
3. Martof A. Consultation with the Specialist: Dental Care. *Pediatrics in Review* 2001; 22: 13-15.
4. Billings RJ, Berkowitz RJ, Watson G. Teeth. *Pediatrics* 2004; 113: Supplement 3 1120-1127.
5. Brüllmann D, Schulze RK, d'Hoedt B. The treatment of anterior dental trauma. *Dtsch Arztebl Int.* 2010 Aug; 108(34-35):565-70.
6. Day P, Duggal M. Interventions for treating traumatised permanent front teeth: avulsed (knocked out) and replanted. *Cochrane Database Syst Rev*. 2010 Jan 20; (1):CD006542.
7. Emerich K, Wyszkowski J. Clinical practice: dental trauma. *Eur J Pediatr.* 2010 Sep; 169(9):1045-50.
8. Aldrigui JM, Abanto J, Carvalho TS, Mendes FM, Wanderley MT, Bönecker M, Raggio DP. Impact of traumatic dental injuries and malocclusions on quality of life of young children. *Health Qual Life Outcomes.* 2011 Sep 24; 9:78.
9. Mihalik JP, McCaffrey MA, Rivera MA, et al. Effectiveness of mouthguards in reducing neurocognitive deficits following sports-related concussion. *Dent Traumatol.* 2007; 23(1):14–20.