



## Children and Facial Trauma

### *What is facial trauma?*

The term facial trauma means any injury to the face or upper jaw bone. Facial traumas include injuries to the skin covering, underlying skeleton, neck, nasal (sinuses), orbital socket, or oral lining, as well as the teeth and dental structures. Sometimes these types of injuries are called maxillofacial injury. Facial trauma is often recognized by lacerations (breaks in the skin); bruising around the eyes, widening of the distance between the eyes (which may indicate injury to the bones between the eye sockets); movement of the upper jaw when the head is stabilized (which may indicate a fracture in this area); and abnormal sensations on the cheek.

In the U.S., about three million people are treated in emergency departments for facial trauma injuries each year. Of the pediatric patients, five percent have suffered facial fractures. In children less than three years old, the primary cause of these fractures is falls. In children more than five years old the primary cause for facial trauma is motor vehicle accidents.

Our fast paced world of ultra sports and increasing violence puts children at risk for facial injury. But, children's facial injuries require special attention. A child's future growth plays a big role in treatment for facial trauma. So, one of the most important issues as a care giver is to follow a physician's treatment plan as closely as you can until your child is fully recovered.

### *Why is facial trauma different in children than adults?*

Facial trauma can range between minor injury to disfigurement that lasts a lifetime. The face is critical in communicating with others, so it is important to get the best treatment possible. Pediatric facial trauma differs from adult injury because the face is not fully formed and future growth will be a factor in how the child heals and recovers. Certain types of trauma may cause a delay in the growth or further complicate recovery. Difficult cases require physicians with great skill to make a repair that will grow with your child.

### *Types of facial trauma*

New technology, such as CT scans, have improved physicians ability to evaluate and manage facial trauma. In some cases, immediate surgery is needed to realign fractures before they heal incorrectly. Other injuries will have better outcomes if repairs are done after cuts and swelling have improved. A new study has shown that even when injury does not require surgery, it is important to a child's health and welfare to continue to follow up with a physicians care.

### ***Soft tissue injuries***

Injuries such as cuts (lacerations) may occur on the soft tissue of the face. In combination with suturing the wound, the provider should take care to inspect and treat any injuries to the facial nerves, glands, or ducts.

### ***Bone injuries***

When a fracture of the bones in the face occurs, the treatment process is similar to that of a fracture in other parts of the body. Factors that affect how the fracture should be dealt with are the location of the fracture, the severity of the fracture, and the age and general health of the patient. It is important during treatment of facial fractures to be careful that the patient's facial appearance is minimally affected.

### ***Injuries to the teeth and surrounding dental structures***

Isolated injuries to teeth are quite common and may require the expertise of various dental specialists. Because of the specific needs of the dental structures, certain actions and precautions should be taken if a child has received an injury to his or her teeth or surrounding dental structures.

- If a tooth is "knocked out", it should be placed in salt water or milk. The sooner the tooth is re-inserted into the dental socket, the better chance it will survive. Therefore, the patient should see a dentist or oral surgeon as soon as possible.
- Never attempt to "wipe the tooth off" since remnants of the ligament which hold the tooth in the jaw are attached and are vital to the success of replanting the tooth.

### **References:**

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