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, underlying skeleton, neck, nose and sinuses, eye socket, or teeth and other parts of the mouth. Sometimes these types of injuries are called maxillofacial injury. Facial trauma is often recognized by swelling or lacerations (breaks in the skin). Signs of broken bones include bruising around the eyes, widening of the distance between the eyes, movement of the upper jaw when the head is stabilized, abnormal sensations on the face, and bleeding from the nose, mouth, or ear.

In the U.S., about three million people are treated in emergency departments for facial trauma injuries each year. Of the pediatric patients, 5 percent have suffered facial fractures. In children under 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. Fortunately, the correct use of seat belts, boosters, and car seats can dramatically reduce the risk of facial trauma in children.

A number of activities put children at risk for facial injury, such as contact sports, cheerleading, gymnastics, and cycling. Proper supervision and appropriate protective gear should always be employed during these activities. But when accidents do happen, children's facial injuries require special attention, as a child's future growth plays a big role in treatment for facial trauma. So one of the most important issues for a caregiver is to follow a physician's treatment plan as closely as possible 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 growth or further complicate recovery. Difficult cases require doctors or a team of doctors with special skills to make a repair that will grow with your child.

Types of facial trauma

New technology, such as advanced CT scans that can provide three-dimensional anatomic detail, has 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

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outcomes if repairs are done after cuts and swelling have improved. Research has shown that even when an injury does not require surgery, it is important to a child's health and welfare to continue to follow up with a physician's 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 injures to the facial nerves, glands, or ducts. In younger children, many lacerations require sedation or general anesthesia to achieve the best repair.

Bone injuries

When facial bone fractures occur, the treatment is similar to that of a fracture in other parts of the body. Some injuries may not need treatment, and others may require stabilization and fixation using wires, plates, and screws. Factors influencing these treatment decisions 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 style

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 the chance it will survive, so 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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