

## PRACTICE GUIDELINE

Effective Date: 7-16-04

Manual Reference: **Deaconess Trauma Services**

### **TITLE: MANAGEMENT OF SEVERE MAXILLOFACIAL INJURIES**

**PURPOSE:** To define priorities in the management of facial trauma and determine short-term treatment plans for the temporary management of facial trauma.

**DEFINITION:** Facial trauma: Severe fractures of the facial bones and/or lacerations of the face, nose or ear. These fractures may also include fractures of the mandible.

### **GUIDELINES:**

1. Manage the ABC's. Remember that fractures of the facial bones are frequently associated with severe traumatic brain injury and cervical spine fractures. Patients with facial fractures should not have the C-spine cleared until they are truly alert and oriented and can give a satisfactory exam of the neck.
  - a. Airway: Avoid nasotracheal intubation. If an airway is needed, consider orotracheal intubation with in-line stabilization. Cricothyrotomy should be considered with severe mouth and mandible trauma.
  - b. Breathing: Be aware of the possibility of aspirated blood. Any suggestion of aspiration would indicate the immediate need for a secured airway.
  - c. Circulation: Bleeding from facial trauma can be significant and sometimes very occult. Any hypotension should indicate the need for a vigorous resuscitation.
  - d. Disability: Perform a good neuro exam. In the conscious patient, anisocoria will most likely be associated with direct globe trauma or damage to the oculomotor nerve.
  - e. Expose: Make sure that the back of the scalp is examined for any lacerations that might result in severe bleeding. Control obvious vigorous bleeding before proceeding.
  
2. Stop the bleeding!
  - a. Do this as part of the primary survey.
  - b. Scalp bleeding can be controlled with Rainey clips, whip stitches, or staples.
  - c. Facial bleeding can be controlled temporarily with whip stitches of 3-0 nylon.
  - d. Nasal bleeding can be controlled with packing (usually nasal or vaginal packing- beware of basilar skull fractures).
  - e. With uncontrolled bleeding from the mouth, feel for a comminuted mandibular fracture. If one is found, try to align the pieces as this may control the bleeding.
  
3. Once the patient has stabilized, perform a good physical exam looking for:
  - a. Scalp lacerations.
  - b. Depressed skull fractures.
  - c. Depressed frontal sinus fractures.
  - d. Orbital fractures.

- e. Eye injury, loss of eye motion, foreign body in eye.
- f. Malar and zygomatic arch fractures.
- g. Unstable nasal fractures.
- h. Maxillary alveolar ridge fractures.
- i. Missing teeth.
- j. Mandible fractures.
- k. Sensory deficits.
- l. Hemotympanum.
- m. Malocclusion.

4. If patient is stable and is getting a head CT, consider obtaining facial cuts (2 mm). These images may be reformatted in the coronal, sagittal and other paraxial planes to obtain better views of the fractures.

5. Obtain a facial plastics consult.

6. If there is an eye injury, obtain an ophthalmology consult.

7. If patient has multiple lacerations, administer Kefzol 1 gm IV every 8 hours.

8. If the patient has isolated facial trauma, it may be managed early in the first day or two. If there are multiple injuries, facial trauma is not a priority.

**REFERENCES:**

- ❖ Deaconess Trauma Guideline Manual, ENDOTRACHEAL INTUBATION AND AIRWAY MANAGEMENT.
- ❖ Deaconess Trauma Guideline Manual, CRICOTHYROTOMY.

REVIEWED DATE	REVISED DATE
JAN 05	JAN 08
JAN 06	
JAN 07	

