

REGION 11 CHICAGO EMS SYSTEM PROTOCOL

Title: Facial / Dental Trauma – BLS/ALS

Section: Trauma

Approved: EMS Medical Directors Consortium

Effective: July 10, 2024

FACIAL / DENTAL TRAUMA - BLS/ALS

I. PATIENT CARE GOALS

- 1. Preservation of a patent airway.
- 2. Preservation of vision.
- 3. Preservation of dentition.

II. PATIENT MANAGEMENT

A. Assessment

- 1. Perform a complete trauma assessment.
- 2. Assess ABCs with particular focus on ability to keep airway patent:
 - a. Stable midface
 - b. Stable mandible
 - c. Stable dentition (poorly anchored teeth require vigilance for possible aspiration).
- 3. Bleeding (which may be severe epistaxis, oral trauma, facial lacerations).
- 4. Identify if the patient takes blood thinners.
- 5. Cervical spine pain or tenderness (see Spinal Care Protocol).
- Mental status assessment for possible traumatic brain injury (see <u>Head Injury Protocol</u>).
- 7. Gross vision assessment.
- 8. Dental avulsions.
- 9. Any tissue or teeth avulsed should be collected.
- 10. Lost teeth not recovered on scene may be in the airway.
- 11. Overall trauma assessment.
- 12. Specific re-examination geared toward airway and ability to ventilate adequately.



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B. Treatment and Interventions

- 1. Administer oxygen as appropriate to maintain a target oxygen saturation of >94.
- 2. IV access, as needed, for fluid or medication administration.
- 3. Pain medication per the Pain Management Protocol.
- 4. Avulsed tooth:
 - a. Avoid touching the root of the avulsed tooth. Do not wipe off tooth.
 - b. Pick up at crown end. If dirty, rinse off under cold water for 10 seconds.
 - c. Place in milk or saline as the storage medium.

5. Eye trauma:

- a. Place eye shield if available for any significant eye trauma.
- b. If globe is avulsed or enucleated, do not put back into socket. Cover with moist saline dressings and protect from further injury.
- 6. Mandible (lower jaw) unstable:
 - a. Expect patient cannot spit/swallow effectively and have suction readily available.
 - b. Preferentially transport sitting up with emesis basin/suction available (in the absence of a suspected spinal injury, see Spinal Care Protocol).
- 7. Epistaxis (nosebleed) Squeeze nose (or have patient do so) for 10-15 minutes continuously.
- 8. Nose/ear avulsion:
 - a. Recover tissue if possible.
 - b. Transport with avulsed tissue wrapped in dry sterile gauze in a plastic bag placed on ice.
 - c. Severe ear and nose lacerations can be addressed with a protective moist sterile dressing.

C. Patient Safety Considerations

- 1. Frequent reassessment of airway.
- Maintenance of a patent airway is the highest priority; therefore, conduct cervical spine assessment (per <u>Spinal Care Protocol</u>) to enable transport sitting up for difficulty with bleeding, swallowing, or handling secretions.



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III. NOTES/EDUCATIONAL PEARLS

A. Key Considerations

- 1. Airway may be compromised because of fractures or bleeding.
- 2. After nasal fractures, epistaxis may be posterior and may not respond to direct pressure over the nares with bleeding running down posterior pharynx, potentially compromising airway.
- 3. Protect avulsed tissue and teeth:
 - a. Avulsed teeth may be successfully re-implanted if done so in a very short period after injury at the hospital.
 - b. Use moist sterile dressing for ear and nose cartilage.
- 4. For penetrating eye injuries, do not remove foreign bodies. Cover uninjured eye or ask patient to close eye to prevent conjugate movement of injured eye.
- Consider administration of antiemetics to prevent increases in intraocular pressure due to nausea and vomiting in penetrating and blunt trauma to the eye. See <u>Nausea/Vomiting Protocol</u>.