

**T6****EYE, EAR, NOSE, and THROAT INJURIES**

Management of injuries of the eyes, ears, nose, and throat focuses on airway management and initial stabilization of the injury. Bilateral comparisons can assist in identifying injuries and changes in the patient's status.

**GENERAL**

- personal protective equipment should be utilized as appropriate
- body substance isolation techniques and equipment should be utilized as appropriate
- primary survey
- secondary survey
  - check for contact lenses and or artificial eyes
- consider load and go criteria
- initiate transport
  - on scene times should be kept to a minimum
  - treat other life-threatening conditions en route
- transport the patient to the nearest appropriate health care facility
  - notify the receiving health care facility of the patient's status as soon as possible
  - transport with patient sitting, injuries permitting
  - monitor and treat the patient en route
  - additional surveys and treatments should be conducted en route
- document all actions including the decision to initiate load and go
- report all findings to the receiving facility staff, and document on the patient care report

**SPECIAL CONSIDERATIONS****Eye Injuries**

- if the patient is unconscious, close the eye lids if not contraindicated by injuries
- **Foreign Object**
  - reassure patient
  - locate object visually
  - if mobile and readily identified, attempt to remove object with the edge of a sterile dressing
    - avoid pressing object into the eye
    - roll eyelid up to visualize upper eye, if necessary
  - do not attempt to remove the foreign body if it is adherent or imbedded in the lid or the globe
  - if unable to remove foreign object or the object is adherent or imbedded to any structure
    - place dressing over injured eye
    - advise patient to limit movement of injured eye
  - do not attempt to place a dressing over an injured eye if there is a foreign body in the lid or globe

- **Injured Orbit**
  - treat any open wounds (see Soft Tissue Injuries / Wounds, External and Internal Bleeding Guidelines)
- **Lid Injury**
  - treat any open wounds (see Soft Tissue Injuries / Wounds, External and Internal Bleeding Guidelines)
  - protect underlying structures
- **Injured Globe (Eyeball)**
  - treat any open wounds (see Soft Tissue Injuries / Wounds, External and Internal Bleeding Guidelines)
  - protect the eye using a cone or cup over the injured eye and bulky sterile dressings positioned to prevent any pressure being applied directly to the globe
  - do not apply any pressure directly to the globe
- **Impaled Object**
  - do not remove the impaled object
  - immobilize the impaled object (see Soft Tissue Injuries / Wounds, External and Internal Bleeding Guidelines)
  - secure the object using a cone or cup over the impaled object and bulky sterile dressings positioned to stabilize the object and prevent movement of the object
  - immobilize the patient, if required
- **Avulsed Eye**
  - do not attempt to put the eye back in the socket
  - cover the avulsed eye with moist, sterile, saline soaked dressings
  - secure the eye using a cone or cup over the avulsed eye and bulky sterile dressings positioned to stabilize the eye and prevent movement of the eye
- **Burns (Including Corneal Abrasions)**
  - treat as per Burns Guideline
  - apply moist, sterile, saline soaked dressings loosely over the eye(s)
- **Chemical Burns**
  - treat as per Poisoning and Burns Guidelines
  - avoid contaminating other parts of the patient, including other eye
  - remove contact lenses if the patient is wearing them
  - use water only to flush the eyes
    - do not use any chemical antidotes or neutralizing agents
    - irrigate under the eye lids
    - direct the stream of water away from the uninjured eye or other parts of the patient's body

**NOTE**

- in general, the uninjured eye should not be covered with dressings and bandages
  - if movement of the uninjured eye results in increased pain to the injured eye due to collateral movement the uninjured eye should be covered
    - if this is done, care must be taken to monitor the patient's movements closely
    - emotional support should be provided as even the short term loss of vision may be an anxiety inducing episode

**Ear Injuries**

- **Soft Tissue Injuries**
  - treat as per Soft Tissue Injuries / Wounds, External and Internal Bleeding Guidelines
  - handle injuries gently as there is often considerable pain accompanying these injuries
- **Discharge of Fluid or Blood**
  - do not use direct pressure
  - apply sterile bulky dressings
  - assess patient for possible skull fracture
  - treat for shock if appropriate
- **Foreign Object**
  - do not attempt to remove object
    - it may be difficult to visualize, it may be embedded in the ear tissue, or may not be easily accessible
  - avoid pressing object into the ear
  - place bulky dressing over injured ear
- **Impaled Object**
  - do not remove the impaled object
  - immobilize the impaled object (see Soft Tissue Injuries / Wounds, External and Internal Bleeding Guidelines)
  - secure the object using bulky sterile dressings positioned to stabilize object and prevent movement
  - immobilize the patient, if required
- **Avulsed Ear**
  - locate and save avulsed parts
  - treat as per Soft Tissue Injuries / Wounds, External and Internal Bleeding Guidelines
- **Burns**
  - treat as per Burns Guideline
- **Chemical Burns**
  - treat as per Poisoning and Burns Guidelines
  - avoid contaminating other parts of the patient
  - use water only to flush the ear
    - do not use any chemical antidotes or neutralizing agents

**Nasal Injuries**

- **Soft Tissue Injuries**
  - treat as per Soft Tissue Injuries / Wounds, External and Internal Bleeding Guidelines
  - treatment should focus on maintaining a patent airway

- **Epistaxis (Nosebleed)**
  - establish ABCs
  - control bleeding by applying dressing(s) below the nostrils and squeezing the nostrils together firmly with the fingers
    - maintain the direct pressure
  - apply cold packs to the nose
  - be prepared for the patient to vomit
  - do not allow patient to blow nose
  - position the patient sitting upright and leaning forward
    - supine (or other) position may be required if signs and symptoms of shock are present
    - if the patient must be placed supine, turn the patient to side and monitor the airway
  - treat for shock if required
  - instruct patient to avoid swallowing
    - have the patient attempt to spit out any blood into a basin
  - bleeding from the nose or the escape of clear fluid may be due to head injury (see Central Nervous System Injuries Guideline)
    - for patients with epistaxis due to suspected head injury, do not pinch the nostrils
    - in cases of epistaxis associated with head injury in the unconscious patient, maintenance of a patent airway is the first priority
      - suction may be required to keep the airway clear
    - place dressings below the nostrils for bleeding control
- **Foreign Body in the Nose**
  - do not attempt to remove the object
  - establish ABCs
  - control bleeding, if present, by applying dressing s below the nostrils
  - apply cold packs to the nose, if required
  - obtain a history

### Throat Injuries

- refer to Soft Tissue Injuries/Wounds, External and Internal Bleeding, Burns, and Poisoning Guidelines for management of soft tissue injuries to the throat
  - in the event of venous hemorrhage, apply occlusive dressings to prevent an air embolus
- maintain a high level of suspicion for a cervical spine injury
- continuously monitor the patient for airway compromise due to swelling
- ensure that any direct pressure applied to control hemorrhage does not compromise the airway
- consider load and go with any throat injury
- monitor the patient closely for changes in status
- if external bleeding from the neck cannot be controlled with direct pressure
  - control bleeding by using the carotid pressure point
  - pressure should not be applied to both carotid arteries at the same time
  - load and go should be initiated immediately

- **Injury to the Larynx or Trachea**
  - consider underlying damage to the larynx or trachea if any or all of the following signs and symptoms are observed
    - loss of voice
    - hoarseness
    - signs of airway obstruction when the mouth and nose are clear and there is no evidence of a foreign body in the airway
    - deformities of the neck
    - tracheal deviation
    - subcutaneous emphysema
  - load and go should be initiated immediately

**Table 1 – Specific Points to Note on a Secondary Survey for Patients with EENT Injuries****Secondary Survey Should Include**

- a complete head-to-toe survey with a minimum of patient movement
  
- **specific to the face**
  - compare one side to the other
  - orbits
    - swelling, bruising, lacerations, tenderness
  - lids
    - swelling, bruising, lacerations
  - conjunctivae
    - redness, pus, foreign bodies, jaundice, lacerations
  - globe
    - redness, abnormal coloring, lacerations, rupture, artificial eye
  - pupils
    - shape, size, symmetry, reaction to light
  - eye movement
    - spontaneous movement, asymmetric movement, abnormal gaze, pain on movement, blurred or altered vision
  
- **specific to the ears**
  - compare one side to the other
  - discharge, fluid, or blood
  - swelling or deformity
  - lacerations
  - avulsions
  - foreign body
  - hearing
  - balance
  
- **specific to the nose**
  - discharge, fluid, or blood
  - swelling or deformity
  - nasal flaring
  - foreign body
  - obstruction
  
- **specific to the throat and anterior neck**
  - airway patency
  - extensive bleeding
  - swelling or deformity
  - lacerations
  - jugular venous distention
  - tracheal deviation
  - accessory muscles use
  - foreign body
  - ability to swallow
  - presence of Medic Alert tag

**NOTES :**