

Assessment and Emergency Care of Face and Neck Injuries

Scene Size-up

Scene Safety

Ensure scene safety and safe access to the patient. Standard precautions should include a minimum of gloves and eye protection if there is vomiting. Consider the possibility that facial injuries can cause bleeding into the oropharynx, producing coughing; therefore, consider the use of face shields. Consider donning a gown and shoe covers if other bodily fluids are involved. Determine the number of patients. Assess the need for additional resources.

Mechanism of Injury (MOI)/ Nature of Illness (NOI)

Determine the MOI. Interview the patient, family, and/or bystanders to determine the exact nature of the traumatic forces applied. Maintain a high index of suspicion for associated spinal injuries, especially with rapid acceleration-deceleration MOIs.

Primary Assessment

Form a General Impression

Inquire about the chief complaint and observe the patient's overall body position. Observe the work of breathing and circulation. Determine the level of consciousness using the AVPU scale. Identify immediate threats to life. Determine the priority of care based on the MOI. If the patient has a poor general impression, call for ALS assistance. A rapid scan will help you identify and manage life threats. Maintain a high index of suspicion for airway or respiratory compromise.

Airway and Breathing

Ensure the airway is open, clear, and self-maintained. Evaluate the patient's ventilatory status for rate and depth of breathing, respiratory effort, and tidal volume. Administer high-flow oxygen at 15 L/min, providing ventilatory support as needed. Hypoxia may cause changes in the patient's mental state. If vomiting or bleeding into the oropharynx is a possibility, tilt the backboard to the side after spinal immobilization has been performed and have suction ready.

Circulation

Observe skin color, temperature, and condition; look for life-threatening bleeding and treat accordingly. Evaluate distal pulse rate, quality (strength), and rhythm. Observe for significant oropharyngeal bleeding.

Transport Decision

If the patient has an airway or breathing problem, signs and symptoms of bleeding, or other life threats, manage them immediately and consider rapid transport, performing the secondary assessment en route to the hospital. Consider rapid transport to an appropriate trauma center.

NOTE: The order of the steps in this section differs depending on whether the patient is conscious or unconscious. The following order is for a conscious patient. For an unconscious patient, perform a primary assessment, perform a full-body scan, obtain vital signs, and obtain the past medical history from a family member, bystander, or emergency medical identification device.

History Taking

Investigate Chief Complaint

Investigate the chief complaint. Monitor the patient for changes in mental status. Ask SAMPLE questions. SAMPLE can also be obtained from family, bystanders, and medical alert tags.

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Secondary Assessment

Physical Examinations	Perform a systematic full-body examination or a focused examination on the face and/or neck. Rule out any potential life threats. Advise the patient prior to performing any examination. Do not delay transport to perform the physical examination at the scene. Look for DCAP-BTLS and asymmetry in the face and neck. Pay close attention to injuries that could potentially obstruct the airway or occlude bloodflow to the brain.
Vital Signs	Obtain baseline vital signs as soon as practical. Vital signs should include blood pressure by auscultation, pulse rate and quality, respiration rate and quality, and skin assessment for perfusion. Note the patient's level of consciousness. Use pulse oximetry, if available, to assess the patient's perfusion status.

Reassessment

Interventions	Reassess the primary assessment, vital signs, chief complaint, and any interventions already performed. Assist breathing as required, administering high-flow oxygen.
Communication and Documentation	Contact medical control/receiving hospital with a radio report; many hospitals require additional personnel and a separate treatment area. Include a thorough description of the MOI and the position the patient was found in. Include treatments performed and patient response. Be sure to document the patient's distress, answers to your questions, and any changes in patient status and the time. Follow local protocols. Document the reasoning for your treatment and the patient's response.

NOTE: Although the following steps are widely accepted, be sure to consult and follow your local protocols. Take appropriate standard precautions when treating all patients.

Face and Neck Injuries

General Management of Face and Neck Injuries

1. Establish and maintain a patent airway. Provide oxygen. Monitor for vomiting/bleeding into the oropharynx and protect against aspiration.
2. Perform spinal immobilization if the MOI suggests the possibility of spinal injury.
3. Obtain SAMPLE history and vital signs.
4. Bleeding from soft-tissue injuries of the face or neck can be controlled with gentle direct pressure.
5. Injuries of the eye require specialized handling and definitive care.
6. Avulsed tissue should be kept cool and placed in a sealed container with a moist dressing.
7. Penetrating injuries of the neck could result in an air embolism if there is damage to the large blood vessels of the neck. Cover holes with occlusive dressings.
8. Request ALS when necessary.

Removal of a Foreign Object From the Eye

1. Tell the patient to look down while you grasp the lashes of the upper eyelid with your thumb and index finger. Gently pull the eyelid away from the eyeball.
2. Gently place a cotton-tipped applicator horizontally along the center of the outer surface of the upper eyelid.

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Face and Neck Injuries

Removal of a Foreign Object From the Eye, continued

3. Pull the eyelid forward and up, which causes it to roll or fold back over the applicator, exposing the undersurface of the eyelid.
4. If you see a foreign object on the surface of the eyelid, gently remove it with a moistened, sterile, cotton-tipped applicator.

Stabilizing a Foreign Object Impaled in the Eye

1. To prepare a doughnut ring, wrap a 2" roll around your fingers and thumb seven or eight times. Adjust the diameter by spreading your fingers or squeezing them together.
2. Wrap the remainder of the roll, working around the ring to form a doughnut.
3. Place the dressing over the eye and the impaled object to hold the impaled object in place, and then secure it with a gauze dressing.

Chemical Burns of the Eye

Hold the patient's eyelid open. If only one eye is affected, take care to avoid contaminating the unaffected eye. Flush from the inner corner of the affected eye toward the outside corner. Irrigate the eye for 5 to 20 minutes. Apply a clean, dry dressing to cover the eye after irrigation. Transport the patient promptly to the hospital for further care.

Thermal Burns to the Eye

Cover both eyes with a sterile dressing moistened with sterile saline. Apply an eye shield over the dressing. Provide prompt transport.

Light Burns to the Eye

Cover each eye with a sterile, moist pad and an eye shield. Have the patient lie down during transport to the hospital. Protect the patient from further exposure to bright light.

Lacerations to the Eye

1. Never exert pressure on or manipulate the injured eye (globe) in any way.
2. If part of the eyeball is exposed, gently apply a moist, sterile dressing to prevent drying.
3. Cover the injured eye with a protective metal eye shield, cup, or sterile dressing. Apply soft dressings to both eyes, and provide prompt transport to the hospital.

Blunt Trauma to the Eye

Place the patient on a stretcher and transport promptly. Protect the eye from further injury with a metal shield. Cover the other eye to minimize movement on the injured side.

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Face and Neck Emergencies

Blast Injuries to the Eye

First ensure that the scene is safe. Management depends on the severity of the injury. Do not attempt to remove a foreign body within the globe. Use a clean cup or similar item to protect the area. If only one eye is injured, follow local protocol, which may include covering the other eye to eliminate sympathetic motion. Patients with a sudden loss or decrease of vision will need to be verbally instructed on what actions are taking place around them. If the patient has severe swelling or a hematoma to the eyelid, do not attempt to force the eyelid open to examine the eye.

Nose Injuries

For a nontrauma patient who is bleeding from the nose, place the patient in a sitting position, leaning forward, and pinch his or her nostrils together. For a detailed discussion of the care for epistaxis, see Skill Drill 23-3 in Chapter 23, *Bleeding*.

Ear Injuries

Place a soft, padded dressing between the ear and the scalp. If the ear is avulsed, wrap it in a moist, sterile dressing and place it in a plastic bag. Keep the avulsed tissue cool and transport to the hospital with the patient. Leave any foreign object within the ear for the physician to remove. Note any clear fluid coming from the ear.

Facial Fractures

Remove and save loose teeth or bone fragments from the mouth and transport them with you. Remove any loose dentures or dental bridges to protect against airway obstruction. Maintain an open airway.

Dental Injuries

Apply direct pressure to stop the bleeding. Keep the airway open. Perform suctioning if needed. Handle the tooth by its crown and not by the root. Transport the patient. Bring along the tooth, placing it in either cold milk or sterile saline. Notify the receiving facility about the avulsed tooth.

Injuries of the Cheek

If bleeding is uncontrollable and compromising the patient's airway, consider removing the impaled object if possible. Provide direct pressure on the inside and outside of the cheek. Bandaging should not occlude the mouth or make it difficult for the patient to breathe.

Injuries to the Neck

1. Apply direct pressure to the bleeding site using a gloved fingertip if necessary to control bleeding.
2. Apply a sterile occlusive dressing to ensure that air does not enter a vein or artery.
3. Use roller gauze to secure a dressing in place.
4. Wrap the bandage around and under the patient's shoulder.