Eye Injuries/Complaints

Signs and Symptoms

- Pain, swelling, blood
- Deformity, contusion
- Visual deficit
- Leaking aqueous/vitreous humor
- Upwardly fixed eye
- “Shooting” or “streaking” light
- Visible contaminants
- Rust ring
- Lacrimation

History

- Time of injury/onset
- Blunt/penetrating/chemical
- Open vs. closed injury
- Involved chemicals/MSDS
- Wound Contamination
- Intact visual acuity

Differentials

- Abrasion/Laceration
- Globe rupture
- Retinal nerve damage/detachment
- Chemical/thermal burn
- Orbital fracture
- Orbital compartment syndrome
- Neurological event
- Acute glaucoma
- Retinal artery/vein occlusion

Care

B E I P

Follow General Directive #3, Orders for all Patients.

Pain/visual complaint

B E I P

If patient complains of non-traumatic eye pain or visual disturbance, assess visual impairment, pupils, complete neuro exam, and screen for any unrecognized chemical/agent exposure.

Burn/chemical injury

B E I P

Immediate irrigation with available saline or water.

E I P

2 gtts **Tetracaine** to affected eye. May repeat once after 10 minutes as needed.

Traumatic injury

B E I P

Assess orbital stability and visual impairment (when feasible)

If eye out of socket, protect with saline moistened gauze and do not attempt to replace eye.

E I P

If minor injury only (scratch, small/ superficial foreign body), 2 gtts **Tetracaine** to affected eye. May repeat once after 10 min. as needed.

B E I P

Cover both eyes and transport. Consult medical control for destination determination if dealing with a severe eye injury.

E I P

Refer to Non-cardiac protocol #08 Pain Management, if needed.

Pearls

- Normal visual acuity can be present even with severe eye injury.
- Remove contact lens whenever possible.
- Any chemical or thermal burn to the face/eyes should raise suspicion of respiratory burn.
- Tetracaine administration may facilitate irrigation.
- BLS providers will not generally need to call for ALS assistance solely for tetracaine administration.
- Orbital fractures raise concern of globe or nerve injury and need repeated assessments of visual status.
- Cover both eyes to prevent further injury.
- Use shields, not pads, for physical trauma to eyes. Pads OK for unaffected eye.
- Do not remove impaled objects.
- Maintain constant communication with the patient, especially after covering both eyes.

Performance indicators

- Properly manage the patient’s injury without causing any further harm.