

*Eve*

*Emergencies*

*Hac Ali MD*

*Loresta University of Medical Sciences*

*Ocular trauma  
is the most common cause  
of unilateral blindness in  
children and young adults*

*Correct management of  
patients with eye trauma  
requires a step wise approach*

*If a patient presents with both  
eye and systemic trauma, diagnosis  
and management of any life-threatening  
injury takes precedence over evaluation  
and management of ophthalmic injury*

# *Approach to Eye Trauma*

- ✓ *History*
- ✓ *Eye Examination*
- ✓ *Ancillary Tests*

# *Complete Eye Examination*

*Visual Acuity (VA)*

*Red Reflex (RR)*

*Relative Afferent Pupillary Defect (RAPD)*

*Extraocular Muscles (EOM)*

*Intraocular Pressure (IOP)*

*Visual Field (VF)*

*Anterior Segment Evaluation*

*Ophthalmoscopy*

*IOP*

*By finger*

*By Schiøtz tonometer*

*By Goldmann tonometer*

# *Ancillary Tests*

- | *Rav*

*CT Scan*

*MRI*

*Echography*



# *Eye Trauma*

# *Chemical Burn*

- ✓ *A true ocular emergency*
- ✓ *Alkali are more serious than acids*

*Immediate and copious irrigation  
of chemical burn should be initiated  
before arrival at emergency center*

# *Chemical Burn*

## *Initial Management*

- ✓ *Tonical anesthetic*
- ✓ *Continued irrigation*
- ✓ *Tonical antibiotic*
- ✓ *Eye patch*
- ✓ *Prompt referral to ophthalmologist*

# *Subconjunctival Hemorrhage*

*Traumatic*

*. Nc traumatic*

# *Subconjunctival Hemorrhage*

*No therapy is necessary*

*It usually resolves spontaneously*

# *Recurrent subconj hemorrhage*

*can be seen in association with systemic illness such as uncontrolled hypertension diabetes mellitus ,or a bleeding diathesis*

# *Corneal Abrasion*

*Corneal epithelial defect may be caused by contact with a finger, fingernail, fist, edge of paper, foreign body, contact lens*



# *Corneal Abrasion*

## *Symptoms*

*Pain*

*Foreign body sensation*

*Tearing*

*Photophobia*

*Discomfort with blinking*

# *Corneal Abrasion*

## *Management*

*Tonical cycloplegic*

*Tonical antibiotic*

*Eye patch*

*Close Follo up*

*Note!*

*Patients with contact lens associated  
epithelial defect should  
never be patched*

# *UV Keratitis*

*Corneal epithelium is highly susceptible to injury from UV radiation*

*Arc welding*

*Reflection by snow*

*Symptoms of UV keratitis  
usually begin a few hours after  
exposure to UV*

*Symptoms include severe pain ,  
photophobia tearing  
foreign body sensation*

*Anesthetic eye drop (Tetracaine)  
can be used initially for patient  
examination*

***but should never be prescribed  
for the patient***

# *UV Keratitis*

## *Management*

- ✓ *Analgesic*
- ✓ *Tonical cycloplegic*
- ✓ *Tonical antibiotic*
- ✓ *Eye patch*



*Before removing the corneal foreign  
body, depth of penetration  
should be assessed*

*It is advisable to remove much metallic material as possible because material left in cornea may lead to persistent epithelial defect and poor healing*

*Hypohemia is a common finding in blunt trauma to eye*

*∴ % of patients have other ocular injuries*

*HypHEMA*

*Complications*

*Rebleeding (days)*

*Increased IOP (< %)*

*Corneal blood staining*

# *HypHEMA*

## *Medical Management*

*Eye shield*

*Elevation of the head of bed*

*Moderate restriction of physical activity*

*No Aspirin analgesic*

*Referral to ophthalmologist*

# *Scleral Laceration*

*Important diagnostic signs include*

*Marked decrease in ocular ductions*

*Conjunctival chemosis & hemorrhage*

*Deepened AC*

*Vitreous hemorrhage*

*Hypotony*

*Intraocular foreign body (IOFB)  
should be suspected after any  
ocular or orbital trauma*

# *Sympathetic Ophthalmia*

*Bilateral panuveitis after  
injury to one eye*



*Primary enucleation should be performed only if the globe can not be repaired*

*If there is no hope of visual recovery in a recently ruptured globe, enucleation should be performed within 2 weeks after injury*

# *Orbital Trauma*

- *Le Fort Fractures*
- *Zygomaxillary Fractures*
- *Orbital Apex Fractures*
- *Orbital Roof Fractures*
- *Medial Orbital Fractures*
- *Orbital Floor Fracture*  
*Blow out Fracture*

# *Blow out Fracture*

*Indirect fracture of orbital floor  
that are not associated with  
fracture of inferior orbital rim*

# *Blo out Fracture*

*Lid ecchymosis & edema*

*Diplopia with limitation in upgaze*

*Enophthalmos*

*Hypoesthesia in distribution of  
infraorbital nerve*

*Emphysema of orbit and eyelid*

*No traumatic Causes of  
Red Eye*

*Conjunctivitis*

*Corneal inflammation/infection*

*Uveitis (iritis)*

*Acute glaucoma*

*Inflammation of conjunctiva*  
*( conjunctivitis )*

*is the most common eye disease*  
*worldwide*

# *Causes of Conjunctivitis*

*Bacterial*

*Chlamydial*

*Viral*

*Parasitic*

*Fungal*

*Immunologic*

*Chemical*

*Systemic Disease*

*Unknown*

# *Symptoms of Conjunctivitis*

*Redness*

*Burning sensation*

*Foreign body sensation*

*Tearing*

*Fullness around eye*

*Itching*



# *Bacterial Conjunctivitis*

*Conjunctival injection*

*Mucopurulent discharge*

*Lid crusting*

## *Management*

*Empirical topical antibiotic*

*Topical vasoconstrictor*

*. Eye hygiene*

Be careful about contagiousness

# *Ophthalmia Neonatarum*

*Gonococci*

*Chlamydia*

*Chemical*

# *Management*

- ✓ *Admission*
- ✓ *Systemic antibiotic*
- ✓ *Conious irrigation*
- ✓ *Frequent observation*

# *Viral Conjunctivitis*

*Coniunctival injection*

*Watery discharge*

*Preauricular adenopathy*

*Management*

*Therapy is mainly supportive*

# *Allergic Conjunctivitis*

- *Itching*
- *Conjunctival injection*
- *Chemosis*
- *Muroid discharge*

# *Management*

*Discontinuation of offending agent*

*Cold compress*

*Antihistamine*

*Topical vasoconstrictor*

*Topical steroid*



# *Corneal Ulcer (Keratitis)*

*1 Bacterial*

*2 Viral*

*3 Fungal*

# *Corneal Ulcer*

## *Symptoms*

- ✓ *Pain*
- ✓ *Coniunctival iniectio*
- ✓ *Reduced vision*
- ✓ *Discharge*
- ✓ *Photophobia*

# *Corneal Ulcer Management*

- 1 Smear & culture*
- 2 Eye shield*
- 3 Prompt referral*

# *Acute glaucoma*

*Severe ocular pain*

*Reduced vision*

*Halo vision*

*Headache*

*Nausea & vomiting*

*High IOP*

*Fixed mid-dilated pupil*

# *Acute Glaucoma*

## *Management*

- ✓ *Timolol*
- ✓ *Pilocarpine*
- ✓ *Acetazolamide*
- ✓ *IV Mannitol or PO glycerine*

# *Iritis*

*Pain*

*Photophobia*

*Conjunctival injection*

*May be blurred vision*

*Normal cornea*

*Normal IOP*

# *Iritis*

## *Management*

*1. Steroid*

*2. Cycloplegic*

*3. Treatment for underlying cause*

# ORBITAL CELLULITIS

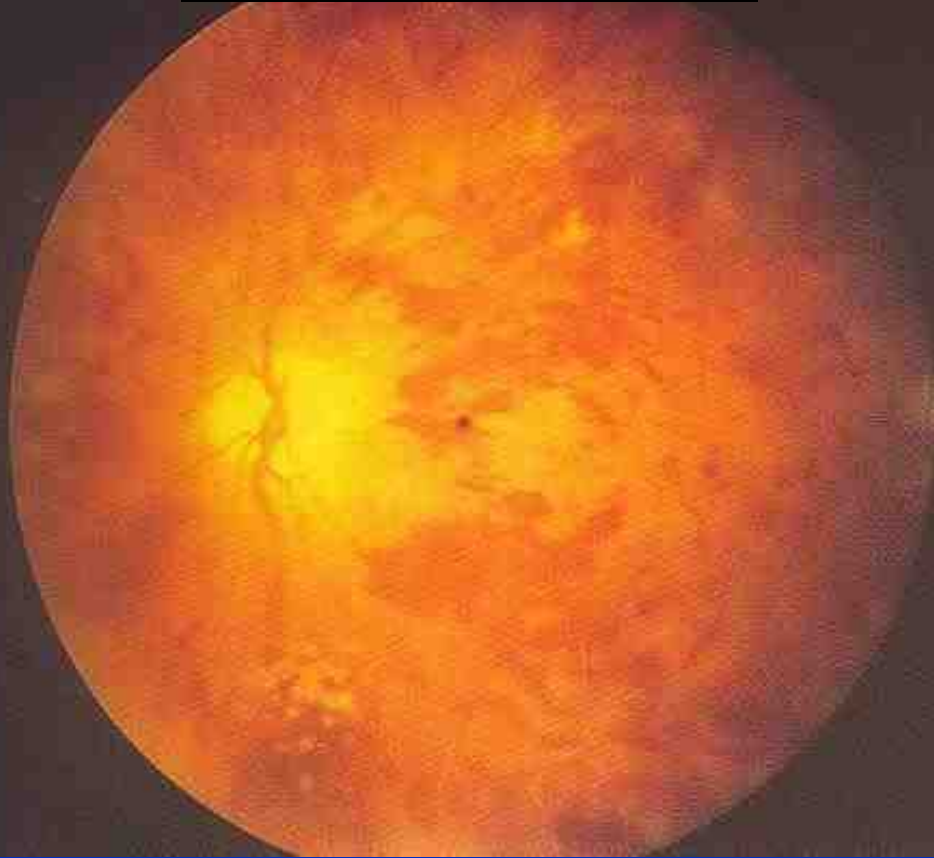
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- External: redness, swelling
- Motility: impaired, painful
- ± Proptosis
- ± Optic nerve: decreased vision, afferent pupillary defect, disc edema



*Sudden non-traumatic visual loss  
in one eye is usually caused by  
retinal or optic nerve lesions*

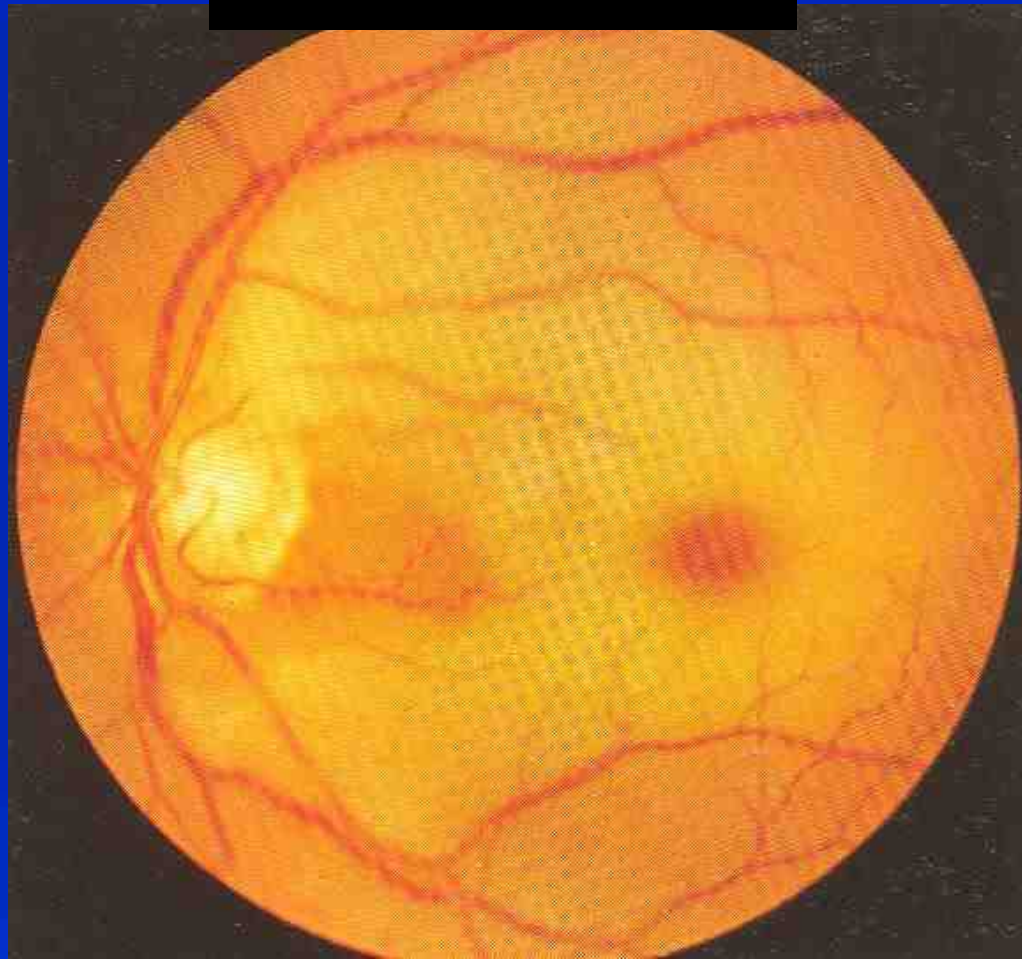
# *CRVO*



# *CRVO*



# *CRAO*



*AION*

