

Triage Considerations

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Professional Disclosures

- Alcon: Consultant, Speaker, Research
- Allergan: Advisory Board, Research, Speaker
- Bausch & Lomb: Advisory Board, Speaker
- Inspire: Research, Speaker, Allergy Advisory Board
- Ista Pharmaceuticals: Research
- Pacific University: Adjunct Assistant Clinical Professor
- Pennsylvania College of Optometry: Externship Coordinator
- Rapid Pathogen Screening: Advisory Board, Speaker
- Science Based Health: Research
- Southern California College of Optometry: Adjunct Clinical Professor
- University of Incarnate Word: Adjunct Clinical Professor
- Valeant Ophthalmics: Advisory Board

Virginia Eye Consultants

Tertiary Referral Eye Care Since 1963

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What is Triage?

- Triage is the screening of patients to ensure that the patients with the most serious complaints are seen promptly.
 - Gathering essential data
 - Date
 - Time of call
 - Name
 - Telephone number
 - Address
- Assess and classify patients' signs and symptoms according to severity and urgency.



Photo Courtesy of Scott Hauswirth, OD

How Urgent is it?

- What is the complaint?
- How did the complaint or symptom originate?
- When did the complaint or symptom start?

Triage Considerations

- Urgency vs. Emergency
- Acute vs. Chronic
- Mild vs. Severe
- Progressive vs. Stable
- Document all calls
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<u>Emergency Immediately</u>	<u>Very Urgent Few Hours</u>	<u>Urgent Within a day</u>
Retinal Artery Occlusions	<u>Perforation</u>	Orbital Cellulitis
<u>Chemical Burns</u>	<u>Ruptured</u>	<u>Orbital Injury</u>
	Acute Glaucoma	Corneal Ulcer
	Sudden Proptosis	<u>Corneal Abrasion</u>
		<u>Hyphema</u>
		<u>Intraocular Foreign Body</u>
		<u>Retinal Detachment</u>
		Macula Edema

Emergencies

- Immediate action
- Chemical burns
- Sudden, painless, severe loss of vision
- Trauma
- Sudden onset of flashes and floaters

Urgent

- 24-48 Hours
- Subacute loss of vision
- Sudden onset of diplopia
- Acute, red eye
- Photophobia
- Ocular pain worsening

Routine

- 48 Hrs to first available
- Loss / broken glasses
- Ocular discomfort
- Difficulty with near work
- Tearing in absence of other symptoms
- Lid twitching
- Mild redness without other symptoms
- Persistent, unchanged floaters

Know Your Office Policies

- Staff Responsibilities
- Doctor Responsibilities

Who's Your Phone a Friend??



Importance of the History

- Who?
- What?
- When?
- Where?
- How?



My Eyes are Red

- Common Causes
- Questions to ask?
- How urgent?

Differential Diagnosis - Clues

If the eye burns,



it's dry eye.

If the eye itches,



it's allergy.

If the eye is sticky,



it's bacterial conjunctivitis.

Vision Changes

- Common Causes
- Questions to ask?
- How urgent?

Glare and Haloes

- Common Causes
- Questions to ask?
- How urgent?

Headaches

- Common Causes
- Questions to ask?
- How urgent?

Eye Pain

- Common Causes
- Questions to ask?
- How urgent?

Ocular Discomfort

- Common Causes
- Questions to ask?
- How urgent?

Broken Glasses or Lost CL

- Common Causes
- Questions to ask?
- How urgent?

Flashes and Floater

- Common Causes
- Questions to ask?
- How urgent?

Patient Work-Up

- VA's
- Pupils
- Ocular Motility
- Visual Fields
- Gross visual examination
- Slitlamp examination
- Fundus examination

The Do's and Don'ts

- Do
 - Medical history
 - Check VA
 - Identify nature of foreign body if one is suspected
- Don't
 - Touch or handle an eye with lacerations or rupture
 - Apply pressure to the globe
 - Administer drops without authorizations
 - Use a previously opened bottle of eyedrops

General Trauma Considerations

- Take care of the obvious
 - ABCDE's
 - Radiology
 - Concussion evaluation
 - Mental status of patient

Fainting or Dizziness

- Get the patient's head below the heart
- Loosen tight clothing
- Break capsule of smelling salts
- Insist patient remain seated until faintness has completely disappeared
- Reassure patient
- Notify the doctor

What if the Patient Falls?

- Notify the OD or other staff
- Do not move the patient until the doctor has assessed for injury
- Do not allow the patient to leave the office until seen by the doctor

Frequency of Traumatic Ocular Conditions

- Superficial injury of the eye and adnexa (41.6%)
- Foreign body on the external eye (25.4%)
- Contusion of the eye and adnexa (16.0%)
- Open ocular adnexa and eyeball wounds (10.1%)
- Orbital floor fracture (1.3%)
- Nerve injury (0.3%)



Rappon, J. Primary Care Ocular Trauma Management. Retrieved from <http://www.pacificu.edu/optometry/oc/courses/21102/primarycasstraumapp1.cfm>

Chemical Burns

- **Emergency!!!** - Every minute counts
- Do not waste time on Hx and PE
- Alkali burns more common and worse than acid
 - Alkali
 - Household cleaners, fertilizers, drain cleaners
 - Acid
 - Industrial cleaners, batteries, vegetable preservatives

Chemical Burns

- Absolute Emergency
- Immediate irrigation
- Check VA
- Check pH if possible

Irrigating the Eye

- Immediately upon arrival get the patient in the exam chair
- Apply topical anesthetic
- Gloves
- Towel to absorb excess fluid
- Perform irrigation with balanced salt solution
- Evert the lids
- Get it all out!

Pearls - Prevention is KEY!!!

- Know the potential eye safety dangers
- All chemical injuries should be lavaged immediately
- Extent of damage is dependent on concentration and pH of acid or base
- Eliminate hazards before starting work
- Use protective measures

Open-Globe Injuries

- Full-thickness wound of the eye wall
- Rupture
- Laceration
- Penetrating
- Perforating

Open Globe

- Check VA - reduced
- Seidel's sign
- Displaced pupil
- Non-reactive pupil
- Low IOP
- Poor reflex
- Hyphema

Treatment for Open Globe Injuries

- Protect the eye with fox shield
- Oral antiemetics to prevent Valsalva maneuvers
- Administer sedation and analgesics PRN
- Avoid topical eye solutions
- Prescribe oral antibiotics
- Refer to OMD for surgical repair

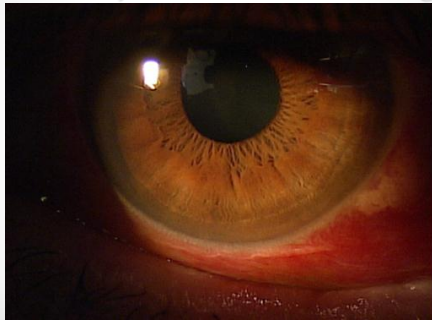
Closed-Globe Injuries

- No full-thickness wound of the eyewall
- Contusion
- Laceration
- Superficial foreign body

Contusion

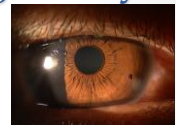
- Need to get eye open
 - Will dictate urgency of consult
- Check VA
- Asses lids and globe for debris or lacerations
- Check pupil response (round pupil)
- Red Reflex?
- Do eyes move well together?
- Instill NaFl to check for abrasions
- Check IOP if all else is clear

Sub-Conjunctival Hemorrhage



Corneal Foreign Body

- Remove if visible and not completely penetrating
- Always document depth of FB
- Stain cornea with NaFl
- Anesthetize eye for patient comfort and to allow a better view.



Corneal Abrasions

- Check VA
- Important to know what abraded the cornea
- Self treatment?
- Grade the level of pain/light sensitivity

Photokeratitis/Snow blindness

- Check VA
- Caused by UVB(C) exposure to the cornea – 320-290nm
- Painful !!!!!
- Superficial punctate keratopathy about 6 hours after exposure (corneal sun burn)
- Typically self limiting
- Welders flash, tanning beds, skiing, desert, sailing

Most Common Conditions

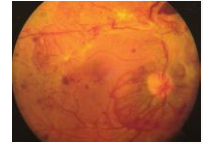
- Diabetes
- Age Related Macular Degeneration
- Retinal Tears and Detachments



Photo accessed from <http://www.aoa.org/diabetic-retinopathy.xml>

Proliferative Diabetic Retinopathy

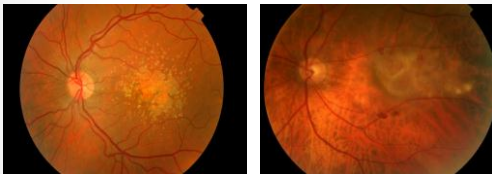
- Neovascularization
- Vitreous hemorrhage
- Fibroglial proliferation
- Tractional RD
- Neovascular glaucoma



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Dry versus Wet AMD



Photos accessed from <http://www.thelondonproject.org/OurVision/TheDisease/?id=74>

Retinal Tears and Detachments



- Treatment depends on size and location of detachment

Photo accessed from <http://www.medicinenet.com/script/main/art.asp?articlekey=121793>

Conclusion

- Educate our patients of optometry's role
- Ask the right questions
- Document everything