Triage Considerations

Walter O. Whitley, OD, MBA, FAAO
Director of Optometric Services
Virginia Eye Consultants

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

- John D. Sheppard, MD, MMSc
- Stephen V. Scoper, MD
- Thomas J. Joly, MD, PhD
- Dayna M. Lago, MD
- Walt O. Whitley, OD, MBA, FAAO
- David M. Salib, MD
- Constance Okeke, MD, MSCE
- Mark Enoch, OD
- Esther Chang, MD

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.

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

<table>
<thead>
<tr>
<th>Emergency Immediately</th>
<th>Very Urgent Few Hours</th>
<th>Urgent Within a day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retinal Artery Occlusions</td>
<td>Perforation</td>
<td>Orbital Cellulitis</td>
</tr>
<tr>
<td>Chemical Burns</td>
<td>Ruptured</td>
<td>Orbital Injury</td>
</tr>
<tr>
<td>Acute Glaucoma</td>
<td>Corneal Ulcer</td>
<td></td>
</tr>
<tr>
<td>Sudden Proptosis</td>
<td>Corneal Abrasion</td>
<td></td>
</tr>
<tr>
<td>Acute Glaucoma</td>
<td>Hyphema</td>
<td></td>
</tr>
<tr>
<td>Intraocular Foreign Body</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retinal Detachment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macula Edema</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 authorization
  - 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%)

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

Proliferative Diabetic Retinopathy

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

Dry versus Wet AMD

Retinal Tears and Detachments

- Treatment depends on size and location of detachment

Conclusion

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