

So NOW What Do We Do?

Emergency Triage for Paraoptometrics

Chris Marquardt, OD

- Private practice in Wausau WI, 1991-present
- WOA Board of Directors, 2005-2019
- WOA President, 2018
- WPA Liaison 2010-2014
- Just an ordinary, average guy

The Emergency Call

The Patient Perspective

- Something has happened to my eye
- There's been a change in my vision
- How much is it bothering me?
- Who do I call?
- Is my optometrist a "real" doctor?

The Emergency Call

The Paraoptometric Perspective

- Who should the patient talk to?
 - Receptionist?
 - Doctor?
 - Tech?
- Best option is likely a technician

The Emergency Call

The Triage Process

DEFINITION

TRIAGE

The process of determining the priorities for action in an emergency and of establishing the order in which to carry out acts of medical assistance

The Emergency Call

The Triage Process

QUESTIONS TO ASK

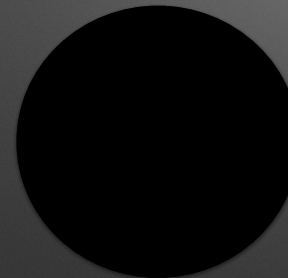
- Onset
- Location
- Type
- Severity
- Changes
- VA Affected?
- Pain
- Treatments

Emergency Classifications

- **Immediate:** See immediately
- **Urgent:** See within 24 hours
- **Priority:** See within a week
- **Routine:** See whenever (weeks to months)

Immediate Emergency

Sudden, painless severe loss of vision

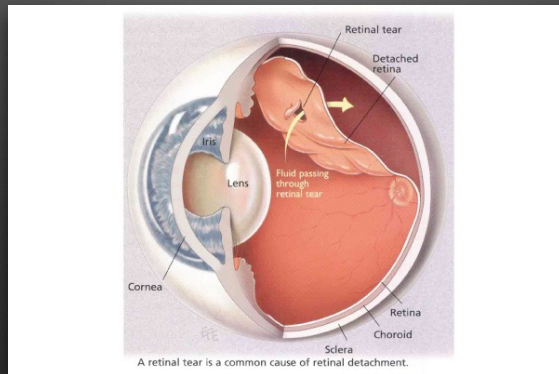


Immediate

Immediate Emergency

Sudden, painless severe loss of vision

Retinal Detachment

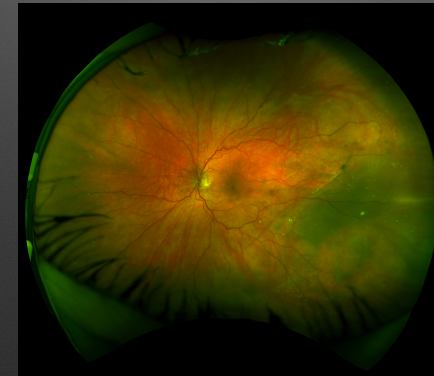


Immediate

Immediate Emergency

Sudden, painless severe loss of vision

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Immediate

Immediate Emergency

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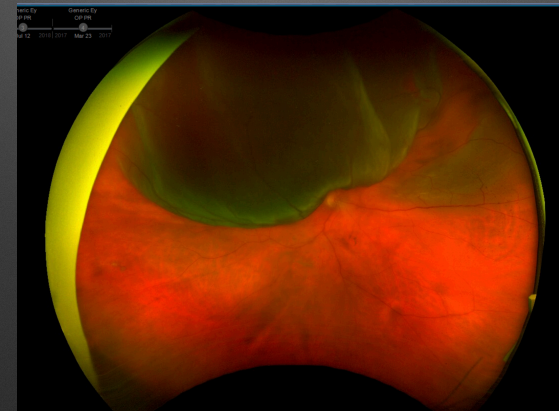


Immediate

Immediate Emergency

Sudden, painless severe loss of vision

Retinal Detachment

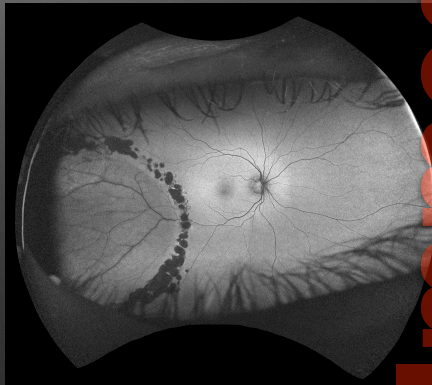
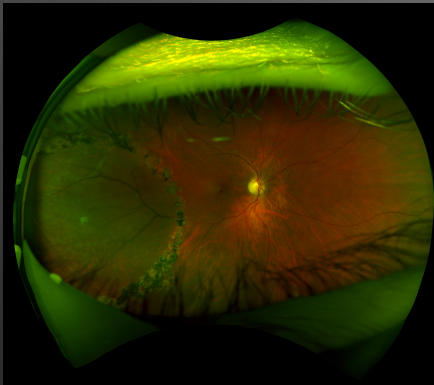


Immediate

Immediate Emergency

Sudden, painless severe loss of vision

Retinal Detachment



Immediate Emergency

Sudden, painless severe loss of vision

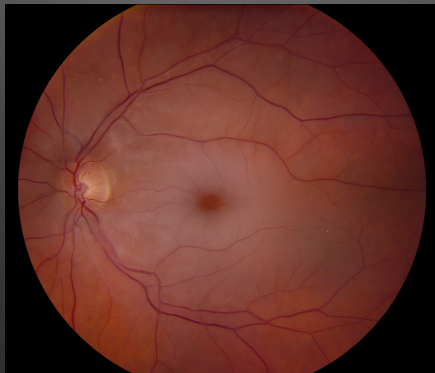
Optic Neuropathy



Immediate Emergency

Sudden, painless severe loss of vision

Central Retinal Artery Occlusion



Immediate Emergency

Sudden, painless severe loss of vision

Central Retinal Vein Occlusion



Immediate Emergency

Sudden, painless severe loss of vision

- Retinal Detachment
- Optic Neuropathy
- Central Retinal Artery Occlusion
- Central Retinal Vein Occlusion
- Migraine

Immediate Emergency

Sudden Onset of Double Vision

True Diplopia



Immediate Emergency

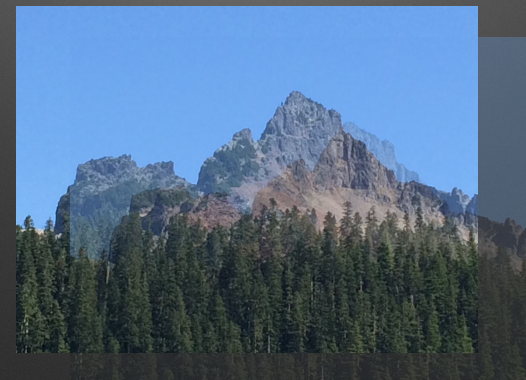
Sudden Onset of Double Vision

- Stroke
- Diabetes
- Brain Tumor
- Neurological Problem
- Trauma

Immediate Emergency

Sudden Onset of Double Vision

Ghosting



Immediate Emergency

Sudden Onset of Double Vision

Monocular vs Binocular Diplopia

- MONOCULAR: Still sees double when closing one eye
- BINOCULAR: Sees double only when both eyes are open

Immediate Emergency

Sudden Onset of Double Vision

Monocular vs Binocular Diplopia

- MONOCULAR: Still sees double when closing one eye
- BINOCULAR: Sees double only when both eyes are open

Which is more urgent?

Immediate Emergency

Sudden Onset of Double Vision

Monocular vs Binocular Diplopia

- MONOCULAR: Still sees double when closing one eye
- BINOCULAR: Sees double only when both eyes are open

Which is more urgent?

Immediate Emergency

Sudden Onset of Double Vision

Monocular vs Binocular Diplopia

- Stroke
- Diabetes
- Neuropathy
- Trauma

Immediate Emergency

Sudden Onset of Double Vision

Monocular vs Binocular Diplopia

- Refractive Error
- Corneal Opacities
- Lens Opacities (cataract)
- Macular Degeneration

Immediate Emergency

Blunt Trauma

- Car Accident
- Fall
- Fist Fight
- “Black Eye”

Immediate Emergency

Blunt Trauma - Complications

- Can cause simultaneous injuries to multiple parts of the eye
- Retinal detachment, angle recession, hyphema, ruptured globe
- Need a comprehensive eye exam
- Possible referrals for X-ray or MRI

Case: Watch Your Step

- 70 YO WM; tripped in his house and fell into the cast iron wood burning stove, hit his eye
- What makes this an emergency?
- What level of emergency?

Case: Watch Your Step



Case: Watch Your Step

- Uncorrected VA: 20/30-2 OD, 20/25-3 OS
- IOP: 20 mmHg OS
- SLE and DFE otherwise unremarkable
- Tx with cold compresses and artificial tears

Case: You Were Doing WHAT?

PHONE MESSAGE

MESSAGE
<p>A guy called stating that his wife/girlfriend has a black eye. He called the nurses hotline and was told to see an eye doctor. The left eye has a pressure feeling below it, feels hard, vision is blurry, headache and it itches. I asked how she got the black eye and he said during sexual activity her knee came up and hit her eye. Checked with KBM and an appt was scheduled for this afternoon with RCM. (JR)</p>

Case: You Were Doing WHAT?

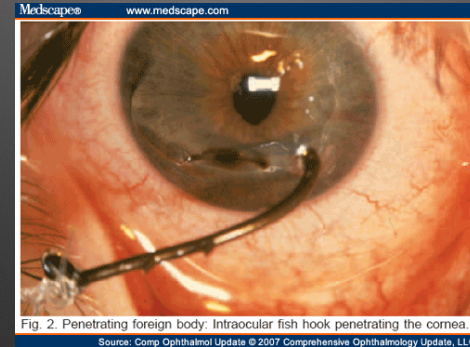


Case: You Were Doing WHAT?

- Uncorrected VA: 20/150 OD, 20/30 OS
- IOP: 8 mmHg OD, 10 OS
- DFE: unremarkable
- Referred to PCP for further imaging
- Lost to follow-up

Immediate Emergency

Penetrating Injury



Immediate Emergency

Penetrating Injury

- Beyond the scope of practice of most ODs
- DO NOT try to remove object
- Immediate referral to ER
- Cover eye with shield, cup and tape, anything to keep the object stable

Immediate Emergency

Chemical Burn

- Acid: pH of <7.0
 - Car batteries, bleach, industrial cleaners, vinegar
- Alkali: pH >7.0
 - Ammonia, lye, lime, fireworks

Immediate Emergency

Chemical Burn

- IRRIGATE
- IRRIGATE
- IRRIGATE
- Come into office
- IRRIGATE

Immediate

Immediate Emergency

Chemical Burn

Which is worse - acid or alkali?

- ACID: Denature corneal proteins which then coagulate to form barrier to further penetration
- ALKALI: Essentially melt cell membranes and dissolve collagen

Immediate

Emergency Classifications

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Urgent Emergency

Corneal Abrasion

- Foreign Body Sensation
- Light Sensitivity
- Excessive Tearing
- Reduced Vision

Urgent

Urgent Emergency

Corneal Abrasion

- Contact lenses?
- What were you doing?
- Did you wake up with it?
- Any treatment?

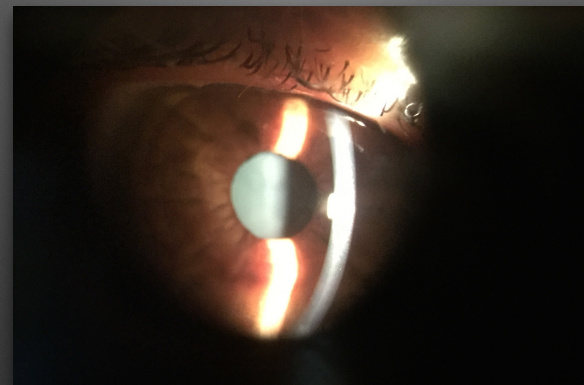
Case: The New Puppy

- Playing with puppy who knocked her glasses off and scratched her eye
- Went to ER and they prescribed antibiotic drops
- Eye is still sore, watery, light sensitive
- VA: 20/20 OD, 20/20 OS

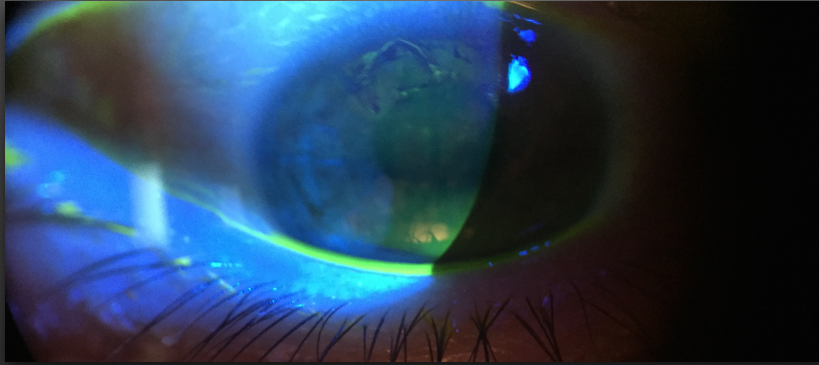
Case: The New Puppy



Case: The New Puppy



Case: The New Puppy



Urgent Emergency

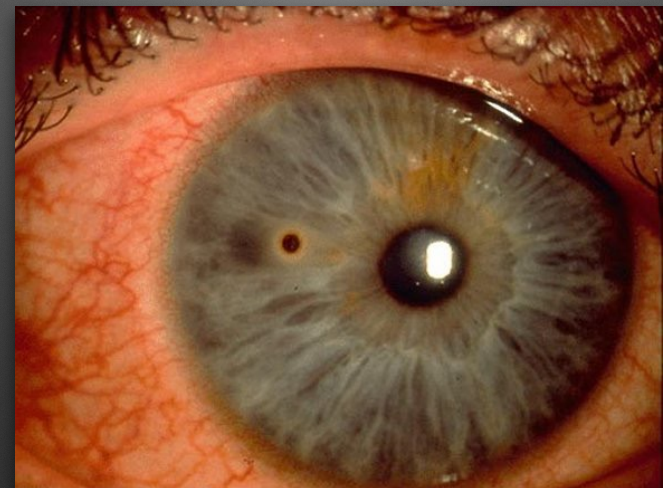
Foreign Body

- Symptoms are very similar to corneal abrasion
- Try to determine exactly what happened
- Do not manipulate an embedded foreign body
- Caution with penetrating foreign bodies

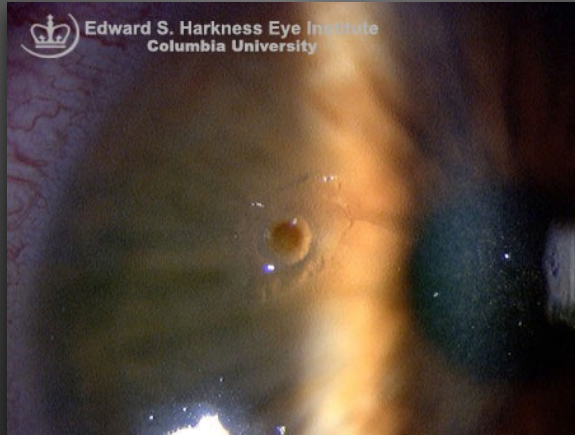
Case: You AGAIN?

- Auto body shop owner, grinding on a car
- Wearing safety glasses?
- Ask triage questions to determine severity

Case: You AGAIN?



Case: You AGAIN?



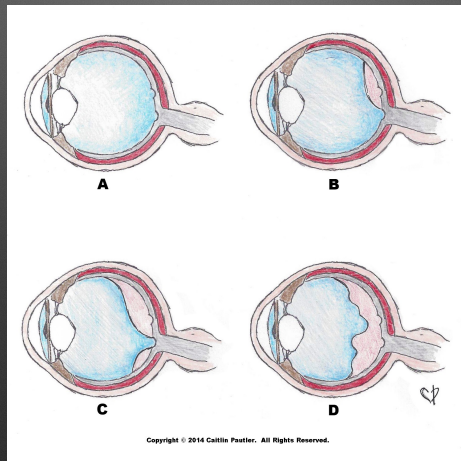
Urgent Emergency

Flashes and/or Floaters

- Reports of flashes of light in peripheral vision
- Reports of threads, spiderwebs, “little wiggly things” in vision
- Often intermittent
- Occasionally accompanied by a curtain or veil across vision

Urgent Emergency

Flashes and/or Floaters



Urgent Emergency

Red Eye

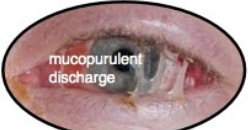
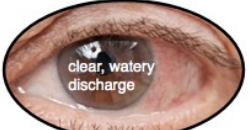
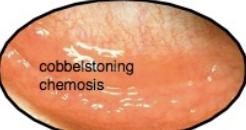
What do we mean by “red”?

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What do we mean by “red”?

Conjunctivitis			
Clinical Finding	Bacterial	Viral	Allergic
Bilateral involvement	50%	25%	Mostly
Discharge	Mucopurulent	Watery	Rare
Redness	Yes	Yes	Yes
Pruritus	Rare	Rare	Yes

		
Bacterial	Viral	Allergic

What do we mean by “red”?

TABLE 1. Differential diagnosis of conjunctivitis and other ocular disorders^{4-6,9,10}

Conjunctivitis				Other ocular disorders		
Bacterial	Hyperacute bacterial	Viral	Allergic	Foreign body presence	Corneal abrasion	Blepharitis
<ul style="list-style-type: none"> Constant crusty, discolored discharge Possible photophobia Some itching Blurry vision, but clears with blinking Moderate erythema 	<ul style="list-style-type: none"> Copious, thick, purulent, yellow-green Possible photophobia Some itching Blurry vision Severe edema and erythema 	<ul style="list-style-type: none"> Watery discharge Photophobia Some itching Usually no vision changes Mild-to-moderate erythema 	<ul style="list-style-type: none"> White, stringy mucoid discharge Frequent photophobia Very itchy Usually no vision changes Mild-to-moderate erythema 	<ul style="list-style-type: none"> Watery discharge Photophobia Irritation Usually blurry vision Mild-to-moderate erythema 	<ul style="list-style-type: none"> Watery discharge Photophobia Severe pain Blurry vision Mild-to-moderate erythema 	<ul style="list-style-type: none"> Eyelid crusting No photophobia Some itching No vision change Mild erythema

Emergency Classifications

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Priority Emergency

Gradual Vision Loss

- Signs/symptoms
- How does this differ from the **Immediate** kind?
- Examples: changing Rx, cataract, etc.

Priority

Priority Emergency

Double Vision

- Signs/symptoms
- How does this differ from the **Immediate** kind?
- Examples: Monocular diplopia related to cataract, AMD, corneal change

Priority

Emergency Classifications

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Routine “Emergency”

Everything Else

- Often worth seeing patient as schedules permit in order to rule out anything serious
- No hurry to do so, but see what patient desires

Routine

Implementing a Plan



- Meet with OD to determine office protocol
- Develop phone triage form
- Familiarize yourself with common conditions
- If you're not sure, ASK!

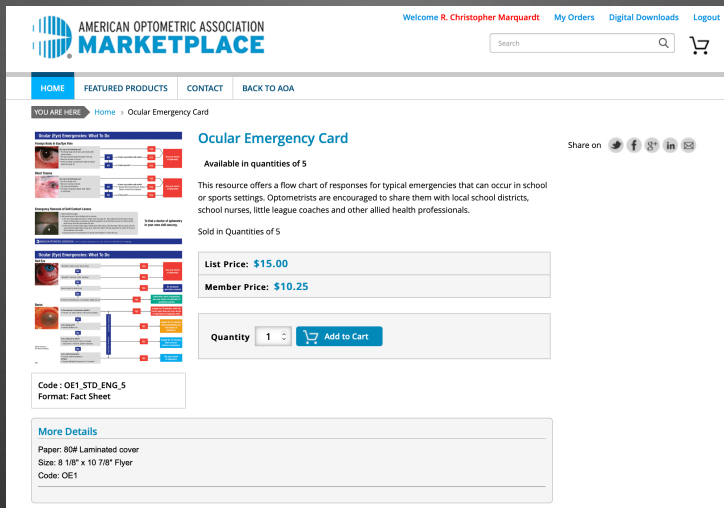
Implementing a Plan

Sample Triage Form

- Include pertinent demographic information
- Remember the questions to ask, and get the most complete history you can
- If you're not sure, ASK!

Telephone Triage Form			
Name	_____		
DOB	_____		
Date	_____		
Time	_____		
Call Received By	_____		
Complaint	OD	OS	OU

Date of First Symptom _____			
Onset:	Sudden	Gradual	Changes: Worse Better
Associated Signs and Symptoms: _____			
Vision Changes?	Yes	No	Distance Near
Floater/Spots in Vision?	Yes	No	
Injury?	Yes	No	
Level of Pain:	(1-10, 10 being highest) _____		
Recent Eye Surgery?	Yes	No	
Action Taken	_____		



AOA Ocular Emergency Card

www.aoa.org/marketplace

Chris Marquardt, OD

Sample Triage Form or Lecture Notes

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