

Eye and Pupillary Assessment

*GFR Training
January 29, 2017*

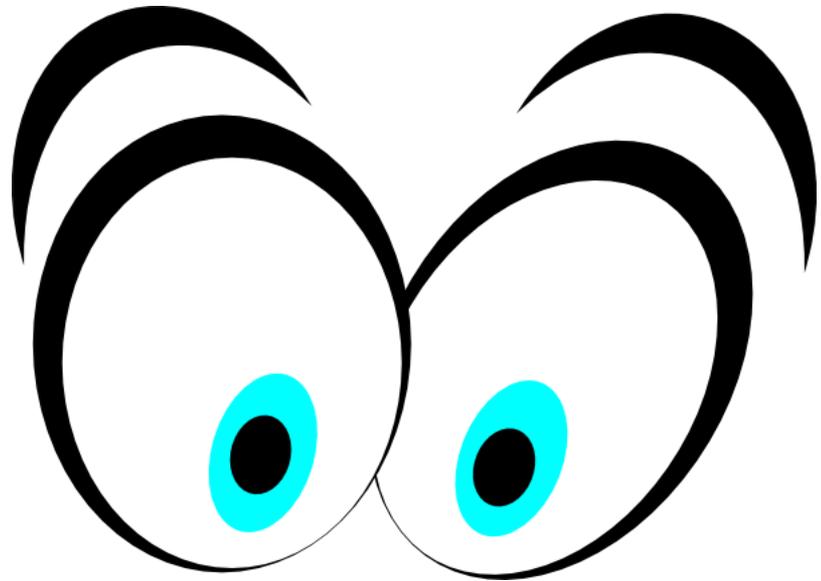
LOOK INTO



MY EYES

What are some things you should look for?

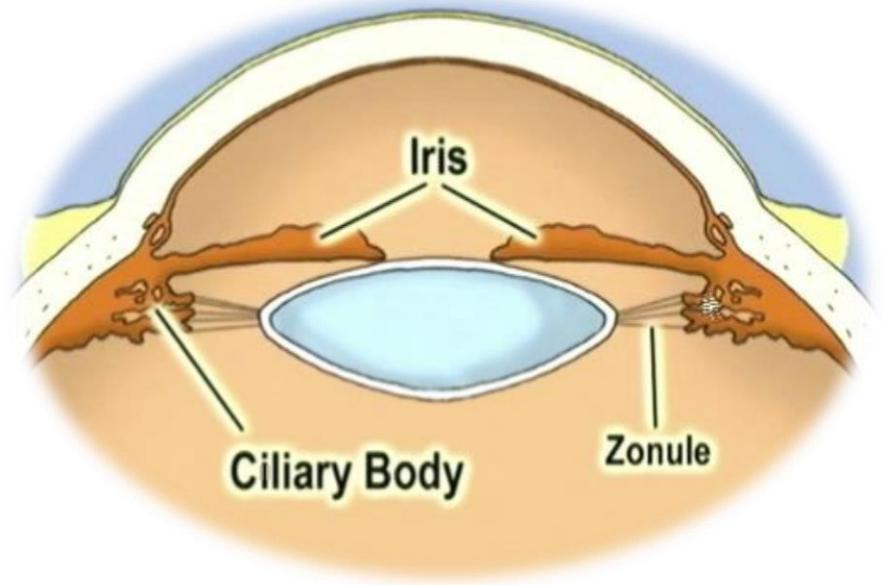
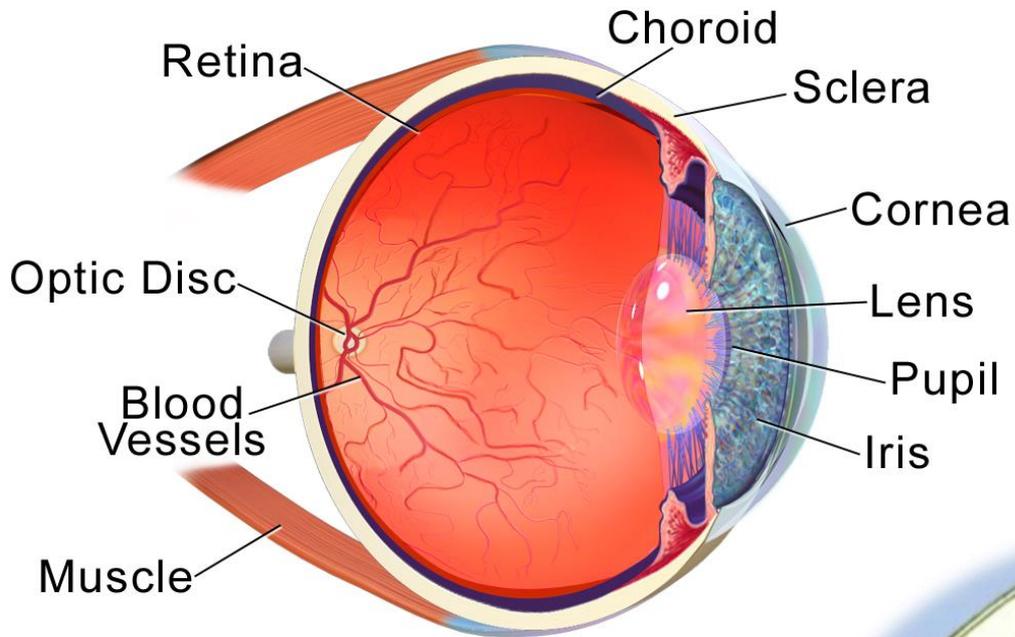
- Pupil Size
- Pupil Shape
- Reactivity
- Tracking
- Redness
- Trauma



What assessment questions may provide more information?

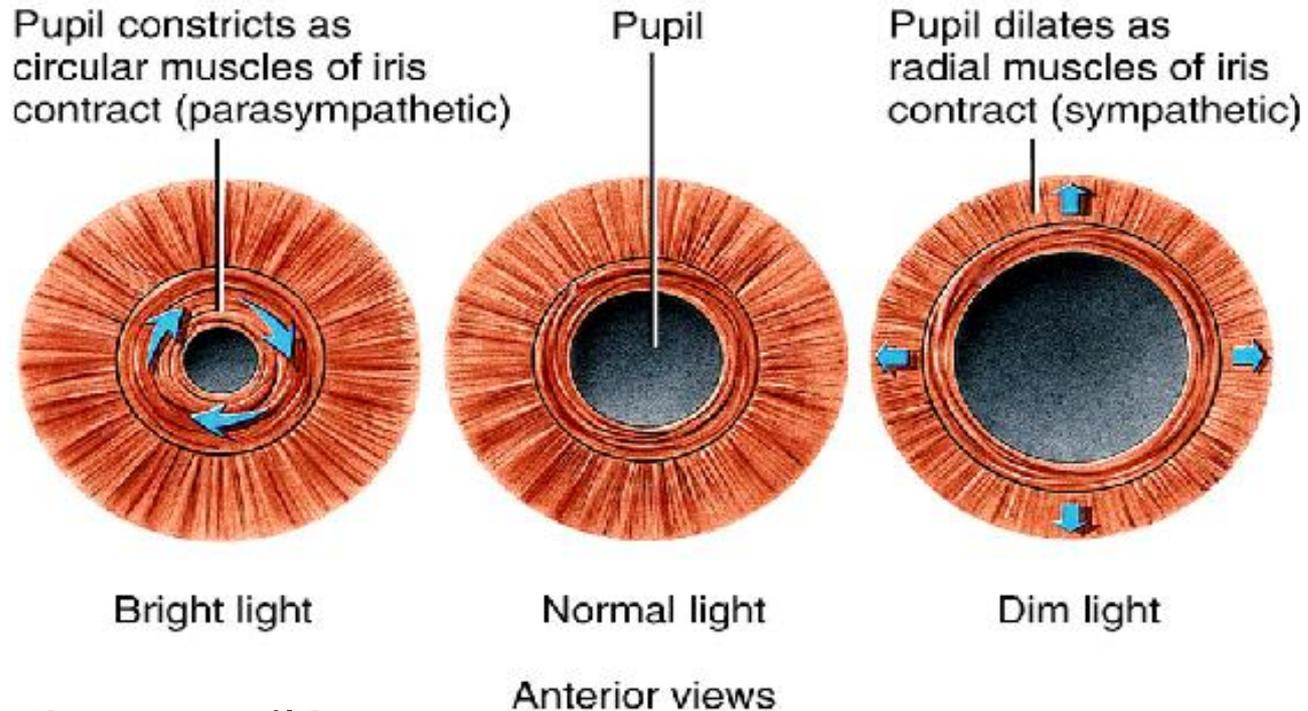
- Sudden blurry vision? Difficult to focus?
- Sudden double vision?
- Sudden loss of vision?
- Seeing things?
- Seeing black spots? Flashes of light?
- Any eye pain?
- Sudden, severe headaches?
- Any recent trauma?

Anatomy



What might happen if there is damage to the ciliary body or the nerves that control the ciliary body?

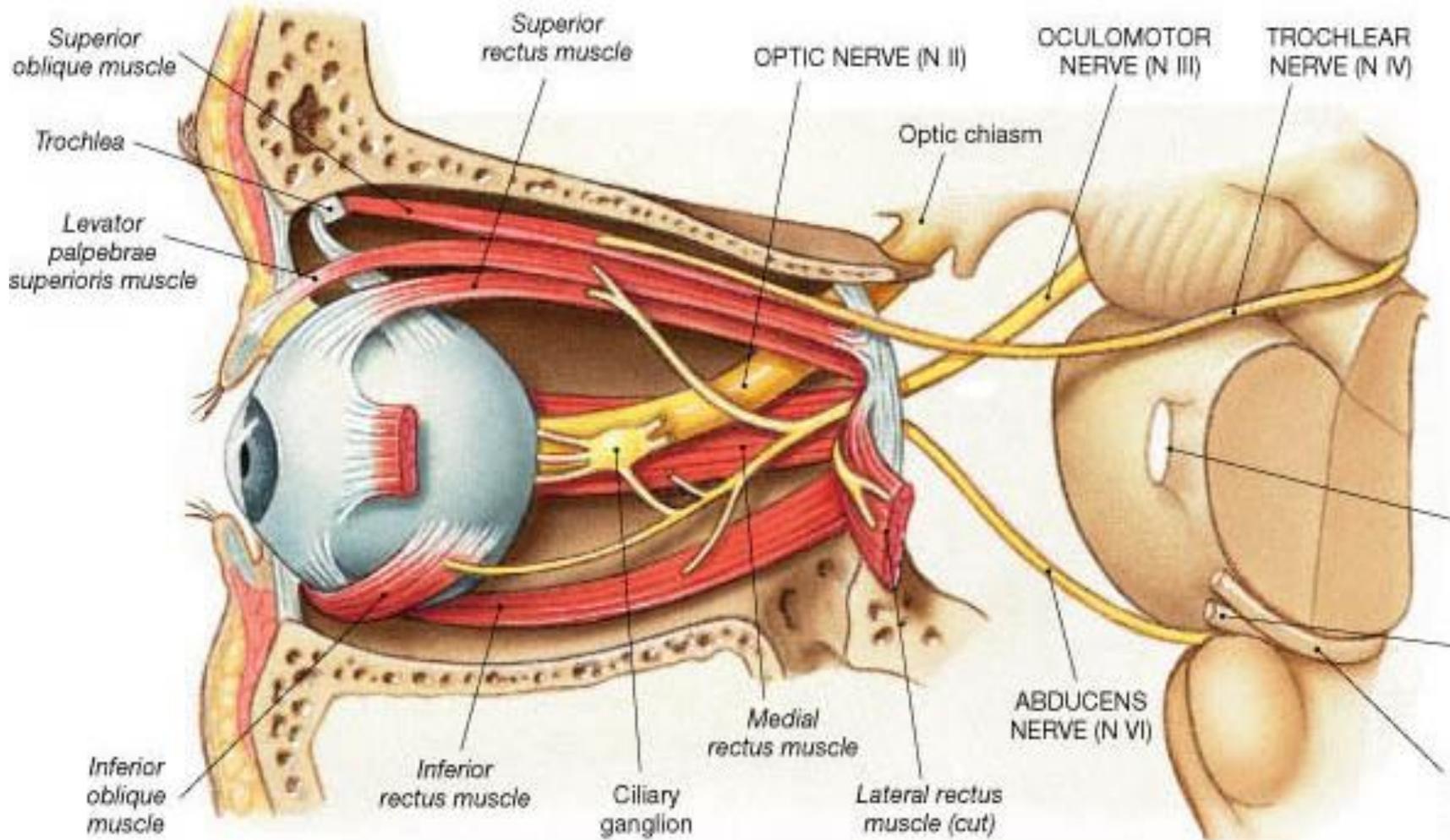
Muscles in the iris control pupil size:



What is the pupil?

What might happen if there is damage to these muscles or to the nerves that control them?

Eye Muscles and Nerves



Normal Eyes



Unusual Eyes



Unilateral Dilated Pupil

III Nerve Compression



Bilateral Dilated Pupils

Midbrain Injury



Irregular Pupils

Orbital Trauma



Conjugate Gaze
Deviation

Frontal Lobe Lesion



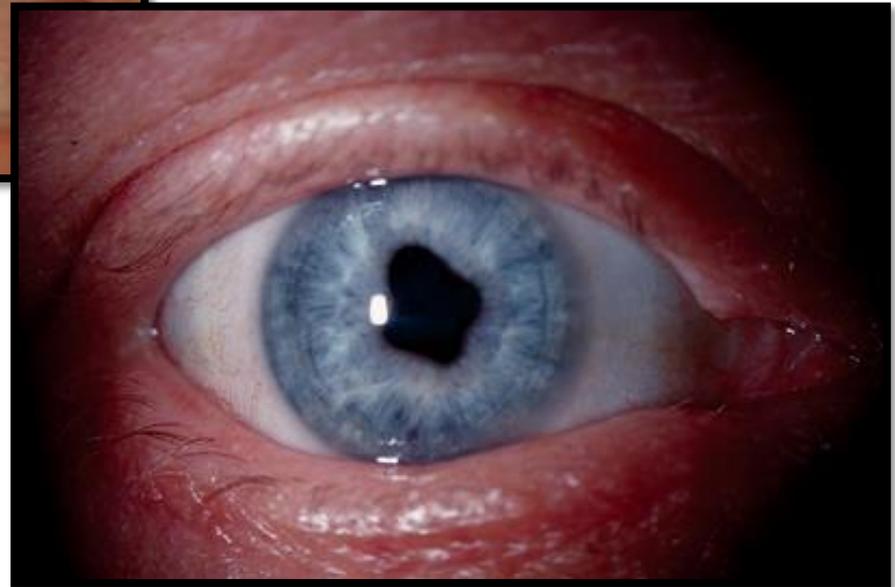
Small / Pinpoint

Pontine Injury, Opiate
Administration

Pupils of Different Sizes



Irregular/Misshapen Pupils



Abnormal Tracking/Movement

When scanning a room, reading, etc., human eyes move in a rapid, jerky fashion. This is called saccadic eye movements. When following (tracking) a single object, eye movements should be smooth and not saccadic. With serious head injuries, eyes often exhibit abnormal tracking movements.

Jerky Tracking

Other things to look for:

- Slow tracking

- Unilateral tracking

- Lack of tracking (no control or no movement at all)

Be sure to check both vertically and horizontally!!

Eyes pointing in different directions

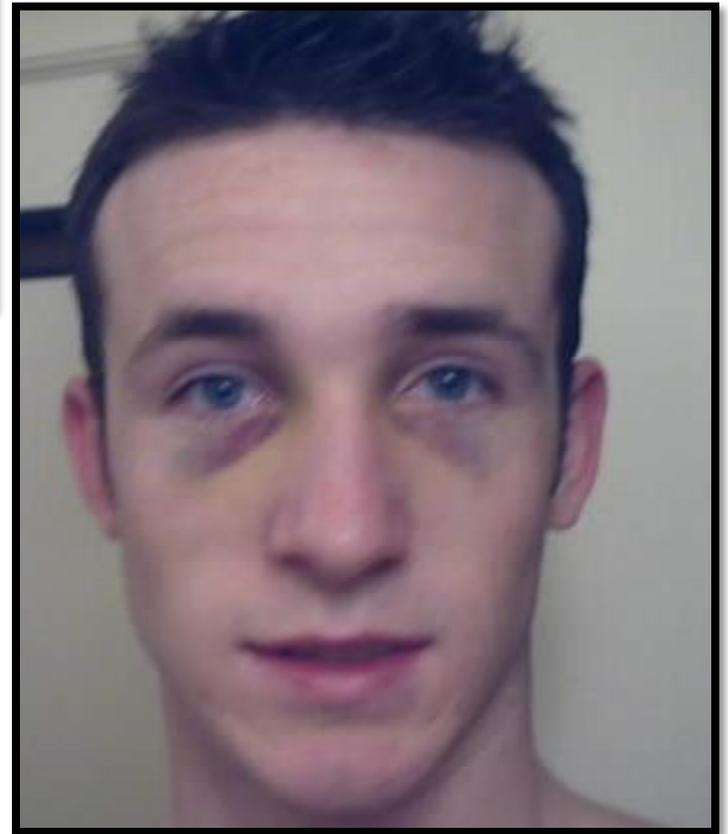


Bruising

Skull Fracture

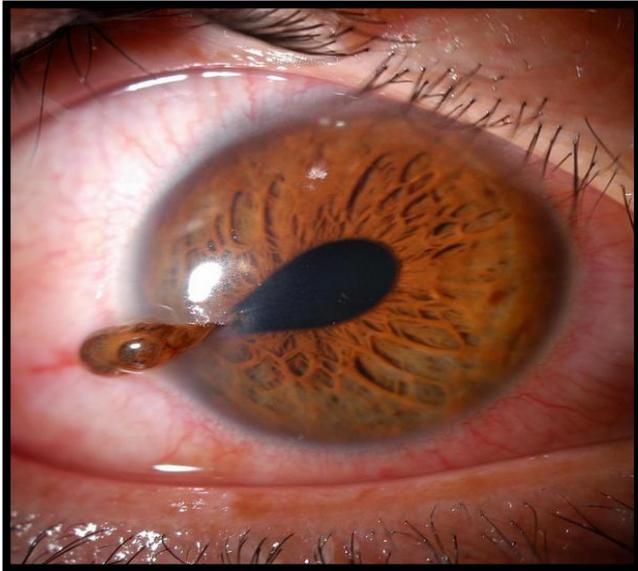


Broken Nose



Possible
Causes?

Globe Rupture Protect



Swelling Ice



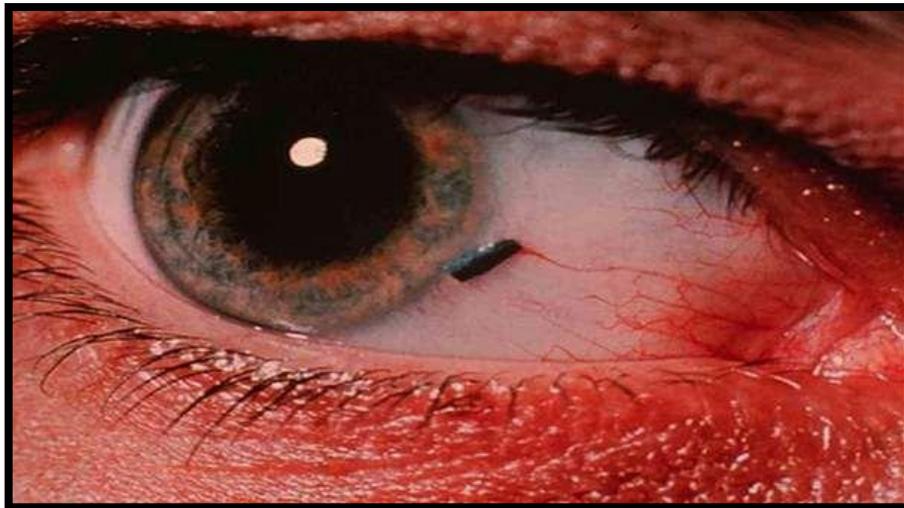
Foreign Objects

One time GFD had a call for a middle-aged man who was using a power drill, and somehow the drill ended up in his eye.

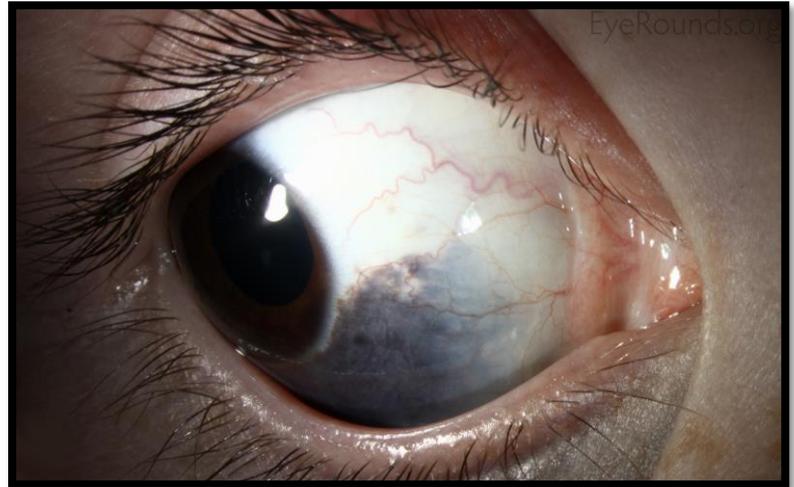
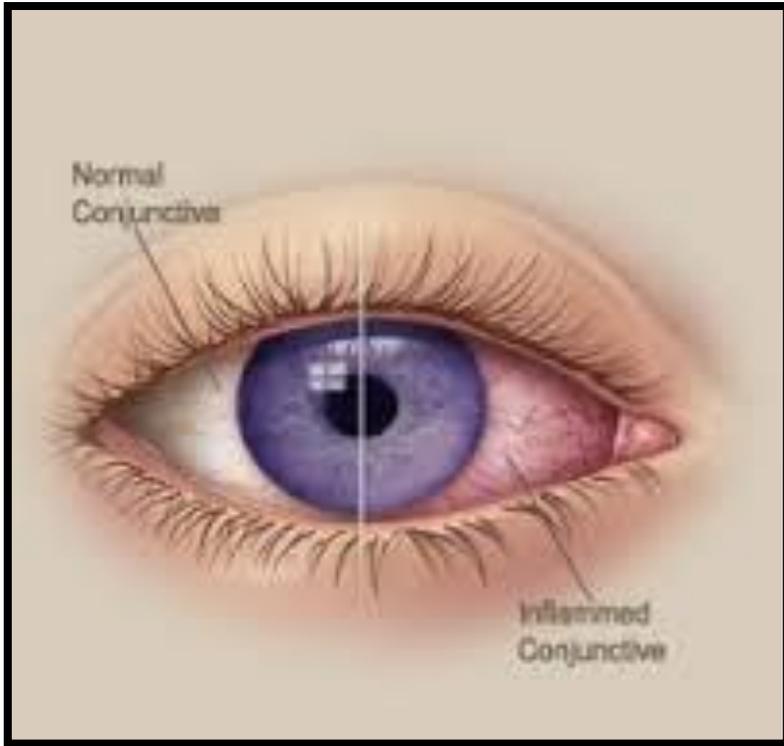
There's always construction going on somewhere on campus, so something like that could very well happen here too. How would you handle and of these situations?

Stabilize

Flush with water/saline



Discoloration

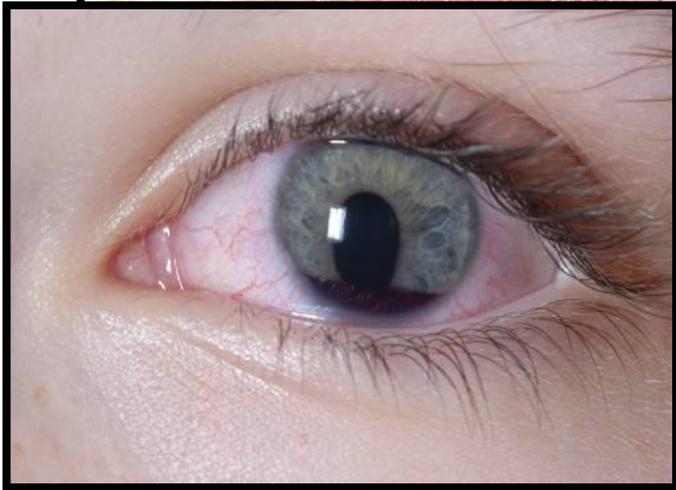


Conjunctivitis (Pink Eye)



Bleeding

Two Conditions:



Hyphema
EMERGENCY

Subconjunctival
Hemorrhage
Not an emergency

Drugs



Marijuana

Opiates



What's wrong here?



Does anyone have a story about patients with abnormal eyes?

One last thing...

How do you determine if your patient's eyes are presenting normally or not?

Questions?

