Pediatric Eye Injuries: Care and Prevention & The See To Learn Program
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- Goddard Grad - 1997
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Learning Objectives
- Discuss the most common eye injuries that occur in children
- Discuss early interventions that can be done when a child presents with an eye injury
- Review Normal Eye Anatomy
- Discuss how to prevent eye injuries
- Discuss the See to Learn Program in Kansas

Why is Vision Important?
- 80% of sensory information that the brain receives comes from the eyes.
Eye Injury Statistics

- 90% of eye injuries are preventable
- 77% males
- 40% of all eye injuries occurred in children under 17
- 29 - 60% were from play or sports

An estimated 2.4 million eye injuries occur in the US each year
- 40,000 cases of vision loss
- $555
  - 7,500 Hospitalizations
  - $88 Million in inpatient charges

TAKE HOME

Safety Glasses
Common Sense

Review of Eye Anatomy
Review of Eye Anatomy

Eye Trauma

- Case 1
  - 8 year old male c/o classmate scratched him in the eye during English.
  - Symptoms:
    - Eye pain
    - Tearing
    - Sensitive to bright lights (photophobia)
  - Diagnosis???

Eye Trauma

- Corneal Abrasion

Eye Trauma

- Corneal Abrasion Treatment
  - Send child to eye doctor
  - My tx:
    - Use topical anesthetic to examine eye
    - Apply topical fluorescein to see abrasion
    - May use a bandage CL
    - Will Rx Ab eye drops
    - May Rx topical NSAID for pain relief
    - Close f/u
    - Patching NOT indicated in children, very rarely in adults

Eye Trauma

- Case 2:
  - 16 year old female feels like she got something in her eye during shop class.
  - C/O
    - Foreign Body sensation
    - Blur
    - Tearing
    - Redness
Eye Trauma

- What to do initially?
  - Rinse eye with copious amounts of sterile eye wash
  - Make sure to invert lids and keep rinsing
  - Rinse some more!

Foreign Body

- If there is suspicion that object is still in eye, immediate referral to eye doc is recommended.
- My tx:
  - Remove FB
  - Ab drop or ointment
  - Pain control

Foreign Body Removal

- https://www.youtube.com/watch?v=1PiAPWIF7yk
- https://youtu.be/1PiAPWIF7yk

Eye Trauma

- Case 3:
  - 5 year old came in from recess and won’t stop rubbing his left eye. He says it hurts and won’t stop watering.
Eye Trauma

- What to DO:
  - Examine eye
  - Rinse with copious amounts of sterile eye wash
  - Make sure to rinse while pulling bottom lid out and rinse under top lid
  - Refer if child still has pain after rinsing for a few minutes

Conjunctival Foreign Body

- Usually not as painful as corneal foreign body
- FB under upper lid can scratch cornea
- Important to rinse out any dirt, sand or other debris you can find.
- Some are stuck in and must be removed by eye doc

Case 4

- 17 y.o. male baseball player comes in with right eye covered. He took a direct hit to the eye/face while on the pitcher’s mound.

Case 4

- What to do:
  - Force eye open if closed
  - Check eye movement in all 8 gazes
  - Check pupils
  - Check acuity
  - If all of the above are ok, apply ice
Case 4

Blow-out Fracture

- Referral to Emergency Department
- Will need imaging and repair of bones that hold eye in place

Case 5

- Corneal Laceration

Case 6

- Lid Laceration

Case 7

- Globe Rupture

Case 8

- Subconjunctival Heme
Case 9

- Hyphema

Case 10

- Chemical Burn

Case 11

- Pink Eye

See to Learn

- FREE EYE EXAMS for 3 year olds in KANSAS!!!
- Yes, I said FREE!!!
- Most Optometrists participate

See to Learn

- Review: 80% of sensory input to brain comes from visual system.
- See to Learn Exams
  - Check for pathology
  - Strabismus (lazy eye)
  - Amblyopia
  - Eye tumor
  - Cataracts
  - Glaucoma
  - Many others

See to Learn

- Extra-ocular motility problems
- Convergence Insufficiencies
- Need for Glasses!!!
- www.seetolearn.com
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Questions??

- Thank you!!