Children who should bypass vision screenings and go straight to an eye exam

Reena Patel, OD, FAAO
5 to 10% of all preschool-aged children

- Significant refractive error
- Amblyopia
  - Poor vision
- Strabismus
  - Misalignment of the eyes
Refractive Error

- Myopia
  - nearsightedness

- Hyperopia
  - farsightedness

- Astigmatism
Strabismus

Inward eye turn

Outward eye turn

Normal

Esotropia

Exotropia

year of
Children's
Vision

Helping kids see, hear, feel the world through reading and writing.
Amblyopia

- High refractive error
- Visual deprivation
- Strabismus
Majority of human learning occurs visually

Vision impairments – more than just “poor vision”
  o Emotional development
  o Neurological development
  o Physical development
Done to detect children who have or are at a risk for having visual impairments

- Significant refractive error
- Strabismus
- Amblyopia

Early screening/detection and treatment = very important
Children at risk for vision impairments

Comprehensive eye examination

Screenings versus Comprehensive eye examination
  - Very common myth: They are both the same thing.

Which children are considered to be “at risk”....?
High Risk Populations

- Neurodevelopmental disorders
- Readily recognized eye abnormalities
- Born premature
- Maternal smoking, drug, alcohol use
- Family history of eye disorders
- Suspected to have an eye disorder
- Difficult to screen
Treatment Options

- Refractive Error
  - Glasses
  - Contact lenses
Strabismus

- Glasses
- Prisms
- Vision Therapy
- Surgery
Amblyopia
- Glasses
- Patching
- Eye drops
Neurodevelopmental disorders

- Visual impairment affects their learning ability
- In addition, may have difficulty with:
  - Speech
  - Motor
  - Hearing
  - Cognition
- Early identification and intervention is critical
Brain maldevelopment – characterized by motor dysfunction

- *Refractive error
- *Strabismus
- *Amblyopia
- Poor eye focusing skills
- Poor eye tracking skills
Chromosomal abnormality – cognitive delays

- *Refractive error
- *Strabismus
- *Amblyopia
- Poor eye focusing skills
- Blepharitis/conjunctivitis
Genetic risk and environmental factors

- Refractive error
- Strabismus
- Poor eye tracking skills
Genetic risk and environmental factors

- Poor eye teaming skills
  - Convergence Insufficiency – may be mislabeled as ADHD
Strabismus
  o Esotropia
    • Inward eye turn
  o Exotropia
    • Outward eye turn
  o Hypertropia
    • Vertical misalignment

Ptosis
  o Droopy eye lid
Leukocoria ("white pupil")

- Uncorrected refractive error
- Strabismus
- Congenital cataract
- Retinopathy of Prematurity
- Coat’s disease
- Retinoblastoma
Children with risk factors for eye disorders

- Born prematurely
  - <32 weeks of gestation
  - Low birth weight (<1500 grams = 3 lbs, 4 ounces)
  - At risk for retinopathy of prematurity

- Maternal smoking, drug or alcohol use during pregnancy

- Family history of eye disorders
Complains about:
- Blurry vision
- Double vision
- Headaches with near work

Squinting

Rubs eyes
Children suspected to have an eye disorder

- Avoids reading
- Holds reading material very close
- Sits close to the TV
- Bumps into things
- Behavioral issues or refuses to do something
Children who are difficult to screen

Something we can all relate to...
Conclusion

❯ Early detection and treatment is extremely critical

❯ Importance of follow up care

❯ Teamwork is key!!
Thank you for your attention!

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