CHOC PSF REFERRAL GUIDELINES
PEDIATRIC OPHTHALMOLOGY

David A. Sami MD
CHOC PSF Division Chief
Pediatric Ophthalmology and Strabismus
845 W La Veta Avenue, Suite 107-B, Orange, CA 92868
Phone (714) 289-2389, Fax (714) 289-2390

- A Pediatric Ophthalmologist is a Board Certified Ophthalmologist who has completed additional training in Pediatric Ophthalmology.

- The American Academy of Pediatrics (AAP), in response to a recommendation from the AAP Subspecialty Work Group, created referral guidelines to assist general pediatricians in determining when to refer their patients to pediatric surgical specialists.

- Many complex pediatric problems are optimally managed by a medical-surgical team rather than an individual surgical specialist.

- The recommendations of the AAP policy statement have been used in part to guide the referral recommendations below.

  Reference:
  PEDIATRICS Vol. 110 No. 1 July 2002, pp. 187-191.
  AAP Surgical Advisory Panel: Guidelines for Referral to Pediatric Surgical Specialists

Methodology

Eye conditions are divided into Categories as outlined below:

1. Visual Behavior / Acuity
2. Eyelids
3. Nasolacrimal System
4. Anterior Segment
5. Ocular Media
6. Sensorimotor System (Pupils and Ocular movements)
7. Prematurity
8. Systemic Disorders
9. Congenital Deformities & Syndromes
10. Non Accidental Injury

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Conditions/Diagnosis	*General Guidelines*	*Refer When:*
Visual Behavior	By 3 months of age babies should exhibit a social smile and make eye contact. *(In premature babies corrected age should be used.)*	Absence of a social smile or eye contact should prompt a referral.
Acuity	Vision testing with a pediatric eye chart is usually feasible beginning age 3-4 years.	A difference of 2 lines or greater between eyes should prompt a referral. Any Acuity ≤ 20/50 should be evaluated.
Eyelids	Mechanical obstruction of vision can produce severe visual loss (deprivational amblyopia). Even in cases of ptosis or eyelid hemangioma in which the pupil is not obstructed, there can still be significant associated Astigmatism with Refractive Amblyopia.  (Right upper lid capillary hemangioma)	Any child with ptosis (droopy lid) or and eyelid mass, persistent > 3-4 weeks, and not improving should be formally evaluated.
Nasolacrimal System:		
Dacyrocoele/Mucocoele	Often heralded by clinically apparent enlargement of the lacrimal sac and bluish discoloration of the overlying skin in the first weeks of life.	Immediate referral – as there is risk for secondary infection and neonatal sepsis.
Tearing	Excessive tearing is usually related to nasolacrimal duct obstruction, and often resolves in the first year of life.	Tearing past 11-12 months requires a referral. If there is recurrent nasolacrimal sac infection (dacryocystitis), earlier referral and treatment is appropriate.

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Conditions/Diagnosis	*General Guidelines*	*Refer When:*
Anterior Segment **Photophobia** **Chronic Conjunctivitis**	 (Right sided congenital glaucoma)	When excess tearing is associated with photophobia (light aversion), corneal enlargement and clouding, an *immediate* referral should be made for possible congenital glaucoma. Persistent conjunctivitis / red eye associated with photophobia and corneal scarring are potential signs of Herpetic (HSV) eye disease and require prompt evaluation.
Ocular Media	Examination of the red reflex is an essential part of healthy baby/child visits in nonverbal children. Infantile cataracts that are not extracted in the first 6-8 weeks of life may be associated with irreversible visual loss and nystagmus.	Anytime there is a dull or asymmetric reflex a referral should be made. If there is a white reflex (leukocoria) an urgent referral should be made to rule out retinoblastoma.
Sensorimotor System **Pupils** **Nystagmus**	A difference in pupil size that is ≤1mm in both light and dark is usually benign.	Any difference in pupil size more than 1mm should be evaluated. Association of mild ptosis (droopy eyelid), with a smaller pupil on the same side, more pronounced in the dark, requires evaluation for Horner's Syndrome and risk for neuroblastoma. A dilated pupil with limitation of eye movement requires *urgent referral* for

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Conditions/Diagnosis	*General Guidelines*	*Refer When:*
Nystagmus ***(continued)***		evaluation of 3rd nerve palsy Any child with nystagmus (oscillating eye movements) should be evaluated. New/acute onset nystagmus requires *urgent evaluation.*
Esotropia (eyes toward nose) **Exotropia** (eyes away from nose	Disruption of binocular vision development in the first 3-6 months of life may produce permanent loss of stereo-vision. Strabismic amblyopia not treated before age 7-8 years is often irreversible.	Any infant older than 3 months of age with constant ocular deviation should be evaluated promptly. Any child with suspected ocular misalignment should be evaluated.
Prematurity	Very Premature infants, <1200g or <28wks, are at risk for development of strabismus and refractive errors – even in the absence of threshold retinopathy of prematurity (ROP).	These infants should be examined at least 3 and 6 months post discharge from the NICU.
Systemic disorders	Children with autoimmune disorders are at risk for uveitis. Children with Type I or II Diabetes >5 years are at risk for development of retinopathy.	Appropriate referral for screening should be made (e.g. JRA, Lupus). Annual screening for children with diabetes > 5 years is recommended.
Congenital Deformities / Syndromes	Subtle abnormalities of the anterior segment may be associated with significant underlying ocular maldevelopment (e.g. small iris coloboma – "key hole pupil" – with possible associated chorioretinal and optic nerve coloboma) Many genetic syndromes have eye findings.	Any congenital deformity that involves the orbit or optic pathways should be evaluated. Children with Down Syndrome are at higher risk for cataracts and high refractive errors. Ocular examination can often aid in diagnosis (e.g. NF, Marfan's). Any child with a history of gestational

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Conditions/Diagnosis	*General Guidelines*	*Refer When:*
Congenital Deformities / Syndromes *(continued)*		drug exposure / alcohol should be evaluated for associated ocular abnormalities.
Non-Accidental Injury	Retinal hemorrhages may be an important clue to possible "shaken baby syndrome" and are more common before age 3 months – due to poor neck control.	Any child with suspected non-accidental injury should have a dilated fundus examination.