Pediatric Ophthalmic Work-Up

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Greeting

- Observe the child in the waiting room
- Watch them walk down the hallway
- Is there a head tilt?
- Behavior issues?
- Watch them play with a small toy
Greeting

• Be cheerful - set the tone for the exam
• Talk directly to the child - let them know they are important
• If uncooperative, spend some time “playing” with parents/sibs
History

• Review chart before rooming patient
  - Read doctor’s last note for special instructions
  - Determine why patient is to be seen today
  - Write in chart prior history and surgeries, patient’s age and gender
  - When was patient last dilated?
History

• Compliance
  - Ask parent about compliance with current treatment plan
  - Glasses, patch, drops, exercises
  - Record hours/days wearing patch/glasses
  - When were drops last given?
History

• Patient Demographics
  - Verify age and grade in school
  - Determine if child receives special services such as PT, OT, speech, special ed. classes
History

• **General Medical History**
  - Diabetes, cancer, metabolic, hearing loss, kidney, JIA (formerly JRA), etc.
  - Autism, ADD, developmental delays, sensory defensiveness
  - Medications (prednisone, plaquenil)
  - Any changes since last exam?
History

• New Patient Exam
  - Who, What, When, How, Why
  - What – parent says ..........
  - When – onset, frequency, change over time, circumstances
  - Why/How – any known causes, what makes this better/worse
  - Seen elsewhere – treatment, results
History

• Patient/Parent Concerns
  - Ask parent & patient if there are any questions
  - Changes in condition since last exam
  - Medication or glasses Rx refill needed?
Exam

- Different from adults
- What is the critical information needed today?
- Shorten/skip history if necessary, fill in later
- Two major things seen:
  - Amblyopia
  - Strabismus
Exam

- Measure glasses & clean every time
- Compare glasses to current Rx
- Preferable to do sensory testing first
Exam

• Sensory Tests
  – Worth 4 Dot
    • Red lens on right
    • Distance and near
    • Room lights on
    • “How many lights do you see?” Record what patient says
    • Fusion: two red & two green or one red, three green
    • Suppression: two red or three green (take turns)
    • Diplopia: two red and three green
Exam

- Worth 4 Dot Fusion
- Worth 4 Dot Fusion
Exam

- Worth 4 Dot OS suppression
- Worth 4 Dot OD suppression
Exam

- Worth 4 Dot Exotropia
- Worth 4 Dot Esotropia
Exam

• Titmus
  - Brief explanation
  - Put glasses on child confidently
  - Pinch the fly’s wings, push down the animal
  - Children instinctively touch 3D objects
  - Fly can be scary
Exam

• EOM/Alignment
  - Versions
    • Babies prefer to follow a face/light
    • Older kids like toys
  - Hirschberg/Bruchner after vision
  - Cover/uncover test
  - Cross cover test
    • On uncover an outward shift: esotropia
    • Inward shift: exoptropia
    • No shift: ortho
    • Control fixation with accommodative target
Exam

• **Visual Acuity**
  - Age appropriate symbols/letters
  - Stick on patch 10 years old and under
  - Nystagmus: use +10 loose trial lens as occluder
    • Check binoc near Va and record distance card held
    • Distance binoc Va
    • Allow head positions
  - Record CSM, F&F, Allen, Lea, #, Snellen, CF, NLP
  - Single optotype or full line, blocked optotype
  - With or without glasses on
  - Which eye checked first; level of cooperation
Exam

- Exotropia
Preferential tests:

- Central, Steady and Maintained vision (CSM)
  - Alternates or maintains fixation
  - No amblyopia: holds fixation through a blink, or with pursuit
  - mild amblyopia: Maintains briefly (up to a blink)
  - moderate amblyopia: Does not maintain, central fixation
  - severe, vision < 20/200: Does not maintain, eccentric fixation
Straight eyed preverbal child tested with: Induced Tropia Testing (ITT)
Exam

- Pupils
  - Note size in dark and light
  - Direct light response
    - No light response, slow, brisk
    - 1 to 4+ Lt reaction
  - Swinging light for APD
  - Check color within and between eyes
  - Ptosis present?
  - If on Atropine is one pupil dilated?
Exam

• Be a cheerleader
• No wrong answers!!
• Lots of praise
• Ask parents/siblings to remain quiet if needed
• Record abnormal head position
• Generally check amblyopic eye first
Wrap-Up

• Review what you’ve recorded for accuracy and completeness
• Record “unable” or “uncooperative”
• Tell doctor what worked well or poorly
• Tell patient and parent what will happen next (doctor will be in)
• Smile and thank them for coming in today!
Thank You