EYE EXAMINATION

Five Steps to the Eye Exam

1. **Visual Acuity**
   
   A. Snellen Chart with glasses on or contacts in, do not dim lights
   B. “E” game
   C. Near card
   D. Fixation and following
   E. Pinhole test

2. **External Exam and Pupils**
   
   A. Lids and adnexa
   B. Conjunctiva, sclera, anterior segment
   C. Pupillary reaction to light
   D. Pupillary reaction to accommodation

3. **Motility - Extraocular Muscle Exam**
   
   A. Ductions
   B. Versions
   C. Hirschberg light reflex test

4. **Visual Fields**
   
   A. Confrontation
   B. Automated

5. **Fundus Exam**
   
   A. Disc
   B. Vessels
   C. Macula
Whenever you ask the patient to cover one eye, always make sure the patient uses the palm of their hand and not their closed fingers. (Pts can open up their fingers and peek.) Or have the patient use a tissue or gauze over the eye. Patients should be instructed not to press on the eye they are covering as it might blur their vision initially when you then test this eye.

❖ Snellen/Visual Acuity
- If a patient gets ≥ half of the letters correct on a given line, they get credit for the line. (The pt does not need to get every letter correct to receive credit for the line) fi patient has glasses, test with glasses, test with glasses on and chart findings as “corrected” visual acuity

❖ Visual Fields
- Examiner asks pt to stare at examiner’s nose
- Ask pt to cover one eye
  - You cover or close your opposite eye (if they cover their right eye, you close your left eye)
  - Stand about two feet from pt and put your fingers half way between you and the pt
- Ask the pt to identify how many fingers you are holding up, do this is temporally, nasally, superior and inferior – use only 1, 2, or 5 fingers (3 or 4 may be confusing)
- An alternate method, but less accurate: wiggle your fingers and ask them to point to which hand you are wiggling your fingers
- Use yourself as a guide, if your vision is normal and you can see your hand, the patient should see your hand too (provided both have normal peripheral vision)

❖ Direct Ophthalmoscopy (hand held scope)
- Make sure the scope works first (check to see if wall devices are plugged in)
- Tell the pt to stare straight across the room, give them something to stare at (clock, towel dispenser). If instead they are looking at you, their pupils will constrict and it will be harder to do this exam.
- Darken the room and TELL the patient before you do this
  - Close shades or blinds
  - Turn off some lights or if you have to turn off all lights, crack the exam door open so a little outside light comes in
- POSITION IS ESSENTIAL for successful visualization of the retina
  - Stand right next to the patients mid thigh (you have to be right next to the pt)
    - You may need to ask pt to:
      ♦ Put their legs together so you can be close to their midline
      ♦ Come forward on the chair or exam table if they are seated far back
      ♦ Sit up straight if they are slouching
  - You want their eyes to be as close to level to your eyes as possible
- RIGHT–RIGHT–RIGHT (Left-left-left)
  - Examiners holds ophthalmoscope in examiner’s RIGHT hand
  - Examiner holds the ophthalmoscope up to examiner’s RIGHT eye
  - Examiner examines the PATIENT’S RIGHT eye.
- HOLDING the direct ophthalmoscope
  - The top of the scope is against your eyebrow
  - The bottom of the scope is held against your upper cheek
    (Students often mistakenly hold the scope away from their own face)
  - Examiner’s head and the scope should move as “one”
- One recommended method: the examiner place their free hand on the pt’s shoulder (after you told them you are doing this)
  - This steadies the examiner
- To visualize the retina, the examiner looks from an angle of 30 degrees to 45 degrees from the pt’s midline
  - Begin about 10 inches away from the pt’s eye and slowly move forward
  - If/when you feel the pt’s cheek against your fingers holding the scope, be careful not to move much closer to the pt (you do not want to hit them with the scope)
- If the patient complains about the brightness of the light:
  - Turn down the intensity of the light on the scope
  - Maybe choose a smaller circle of light on the scope

❖ If you optimize your position and the patient's position, you can almost always find the disc without dilating the eye.

❖ If you cannot find the optic disc, stop and ask yourself, “what is wrong with my position or the patient’s position?”