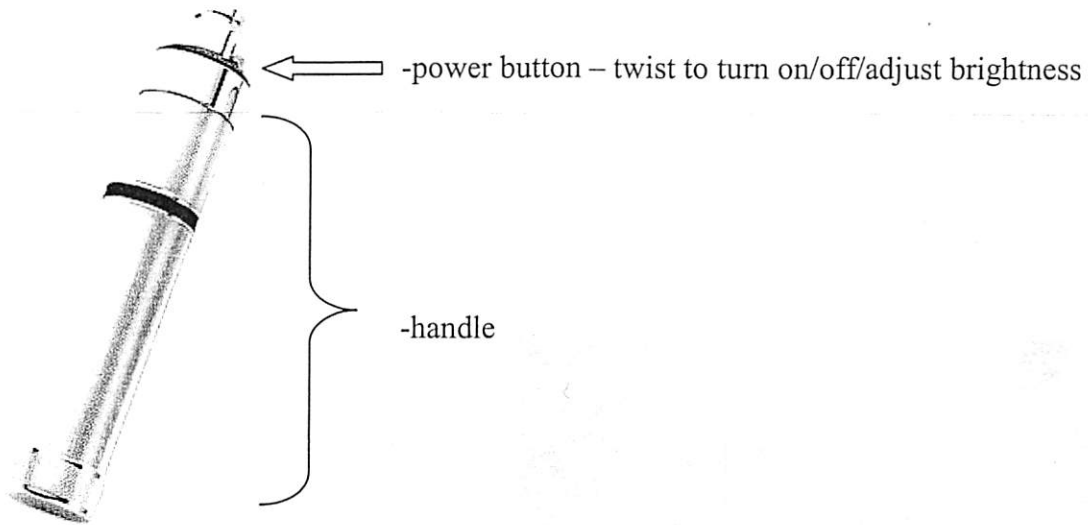
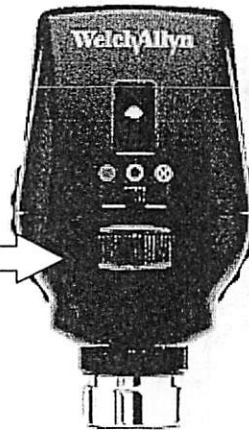


## Direct Ophthalmoscope



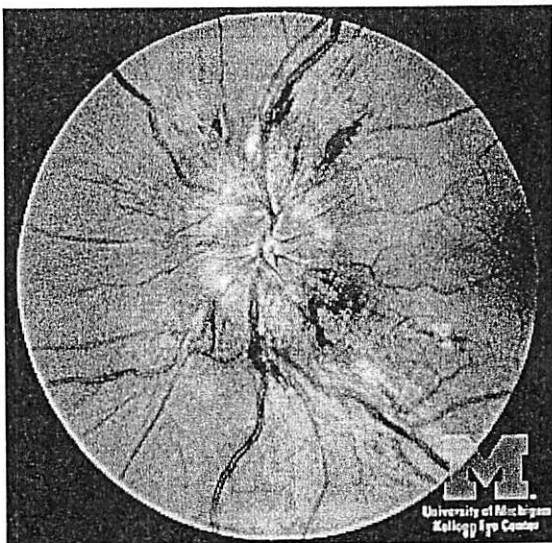
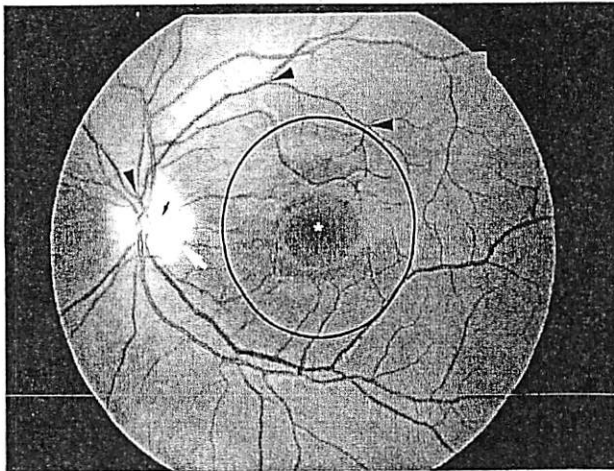
**Aperture dial**  
-small/large  
-grid (0.2mm hash)  
-green  
-cobalt  
-slit beam



**Refractive dial**  
Red (-) minus  
Green (+) plus

## Direct Ophthalmoscopy

- monocular, upright, enlarged image
- field of view 10 degrees
- hold the scope in the same hand as the eye being examined/use the same eye as being examined
- start 0.5 meters away, obliquely
- set refractive dial at '0'
- approaching at 20° temporal to midline will line up with optic nerve
- follow the vessels to the optic nerve
- the fovea is 2 'disk diameters' temporal to the nerve



## Bruckner Test

- Set the direct ophthalmoscope at '0' and position 2-3 feet from the patient
- Dim the room lights
- Position the circle of light over both eyes, and have patient look at the light
  - White pupil (leukocoria) – corneal opacity, retinoblastoma, congenital cataract, retinal diseases, etc.
  - If one eye is fixating, the deviating eye will have a darker reflex



Leukocoria

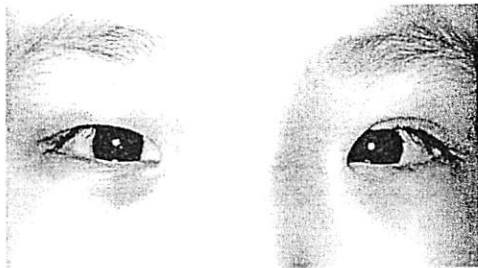
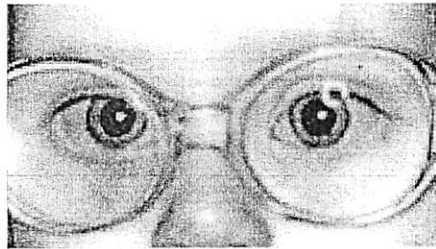


Positive Bruckner Test

- Look over the scope or to the side of the scope
  - to look at the corneal light reflex
  - to look for an abnormal reflex indicating high refractive error



Esotropia with abnormal corneal light reflex



Pseudoesotropia

References:

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Kellogg Eye Center, Department of Ophthalmology and Visual Sciences Interactive website