

ET

XT

DVD



SO

HT

IO

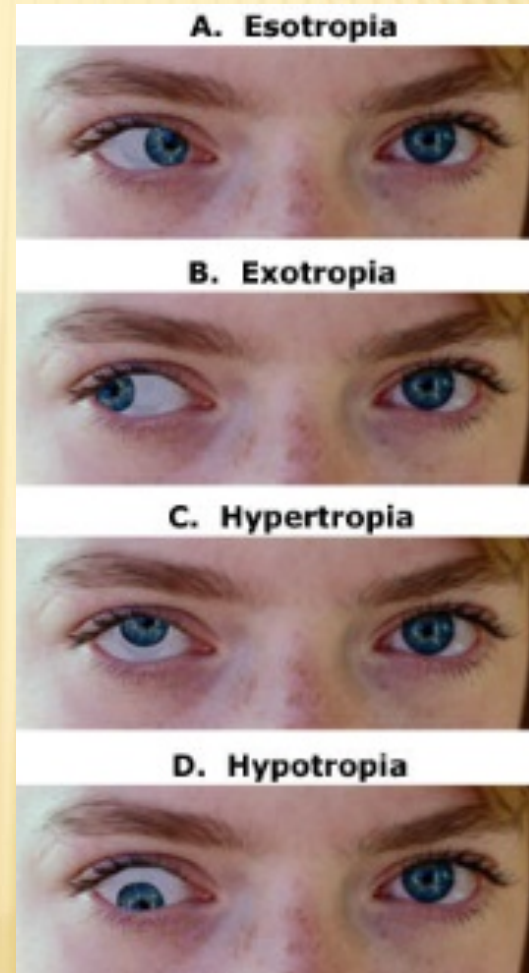
# DEFINITION OF STRABISMUS

- + Tropia or Heterotropia
- + Any deviation or misalignment of one or both of the eyes
  - ✕ Occurs when both eyes do not look at the same place at the same time



# TYPES OF STRABISMUS

- + Esotropia – ET
  - × Eye turns inward
- + Exotropia – XT
  - × Eye turns outward
- + Hypertropia – HT
  - × Eye turns upwards
- + Hypotropia – HypoT
  - × Eye turns downward





# TYPES OF STRABISMUS

- + Esotropia – ET
  - ✗ Corrected with base out (BO) prism
- + Exotropia – XT
  - ✗ Corrected with base in (BI) prism
- + Hypertropia – HT
  - ✗ Corrected with base down (BD) prism
- + Hypotropia – HypoT
  - ✗ Corrected with base up (BU) prism





# ADDITIONAL CLASSIFICATIONS

## ✕ Location of Strabismus

### + Unilateral

#### ✕ When the deviation is always the same eye

- ✧ Constant – RXT or LET

- ✧ Intermittent – RX(T) or LE(T)

### + Alternating

#### ✕ When the deviating eye is not always same side

- ✧ Constant - ET or XT

- ✧ Intermittent – E(T) or X(T)

### + Intermittent

#### ✕ When the deviation does not occur all the time

# DEFINITION OF STRABISMUS

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- + **Phoria or Heterophoria**
- + Condition of latent deviation of the eyes held straight by fusion
  - × Only present when dissociation occurs but not present when dissociation is removed
  - × Dissociation is cover test
- + Classified by its directional movement
  - × Esophoria
  - × Exophoria



# MUSCLE BALANCE TESTING





# MUSCLE BALANCE TESTING

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## Motility Assessment:

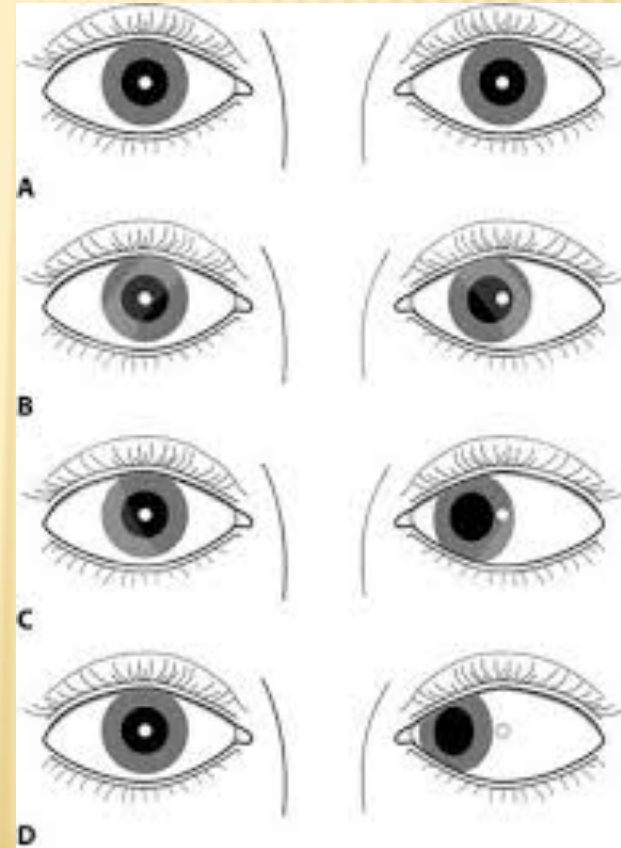
### + Hirschberg test

- × Simplest and least accurate but most relied upon
- × Position a small spot of light arms length from patient
- × Sit directly behind light source
- × Patient fixates on light while examiner compares the relative location of the corneal reflection of each eye

# MUSCLE BALANCE TESTING

Motility Assessment:

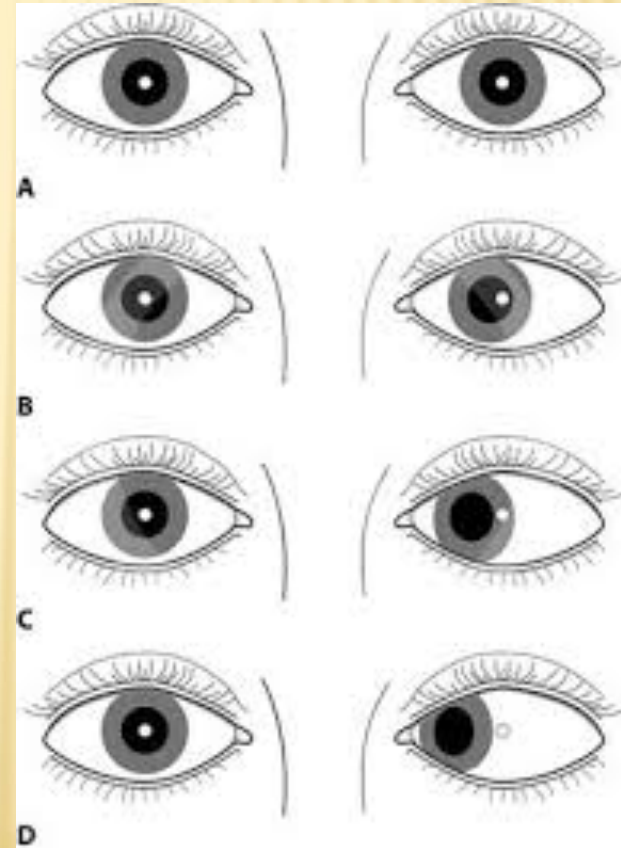
+ Hirschberg test



# MUSCLE BALANCE TESTING

Motility Assessment:

+ Hirschberg test

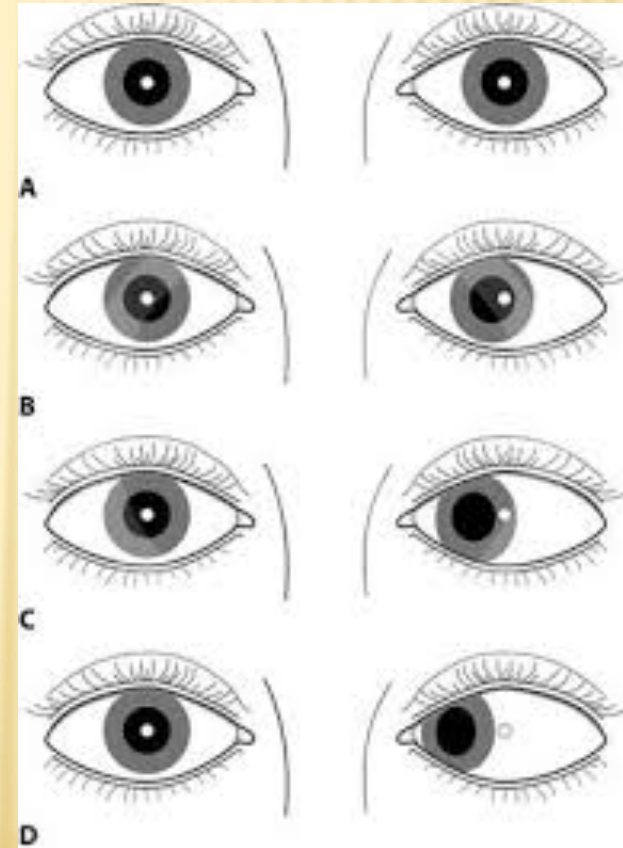
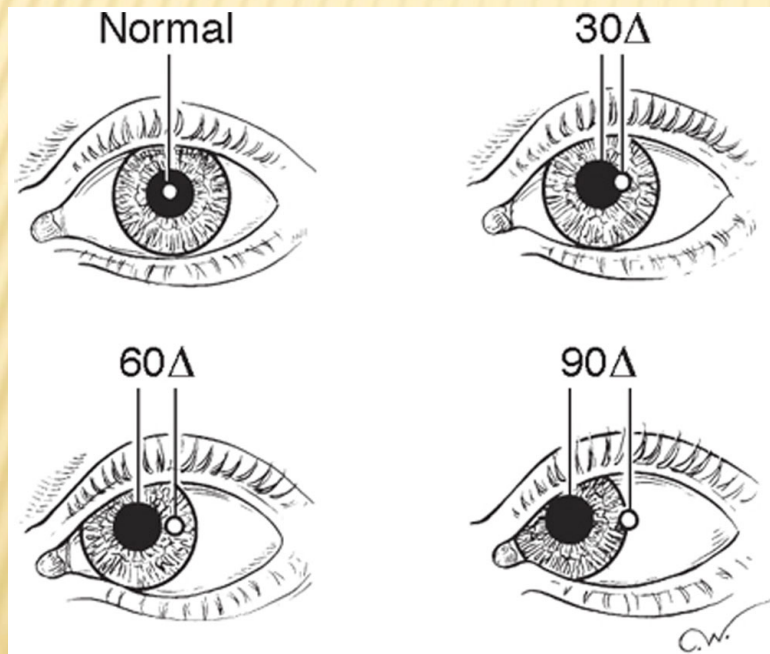




# MUSCLE BALANCE TESTING

## Motility Assessment:

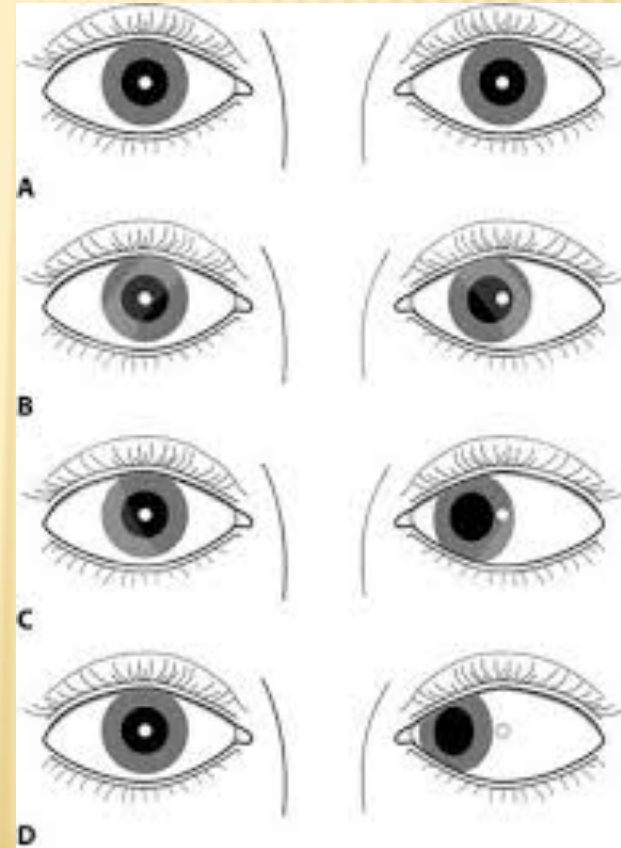
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# MUSCLE BALANCE TESTING

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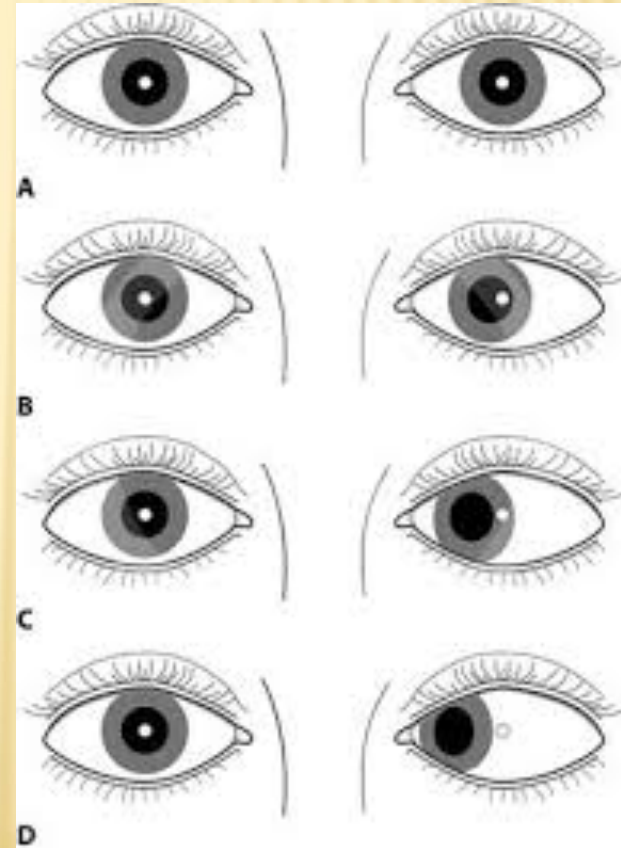
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# MUSCLE BALANCE TESTING

Motility Assessment:

+ Hirschberg test

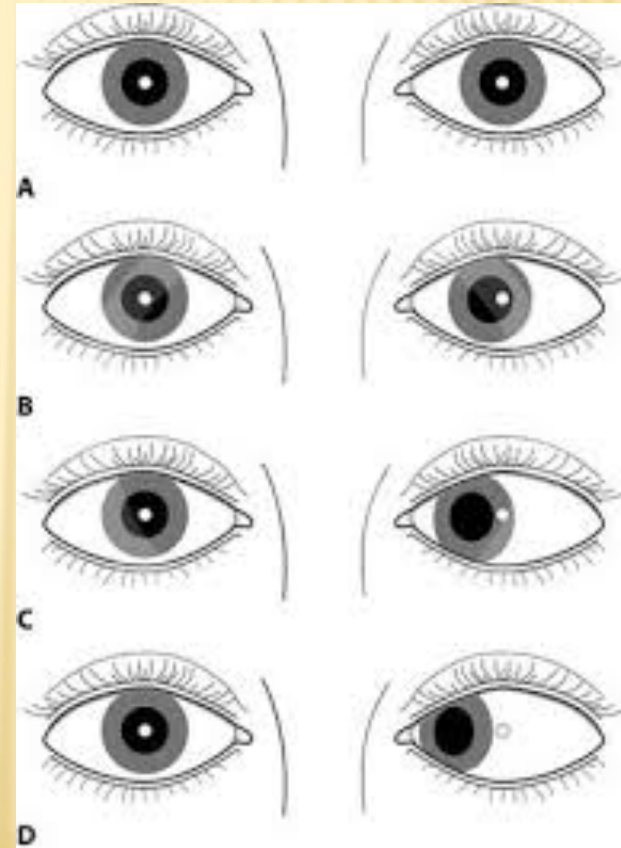




# MUSCLE BALANCE TESTING

Motility Assessment:

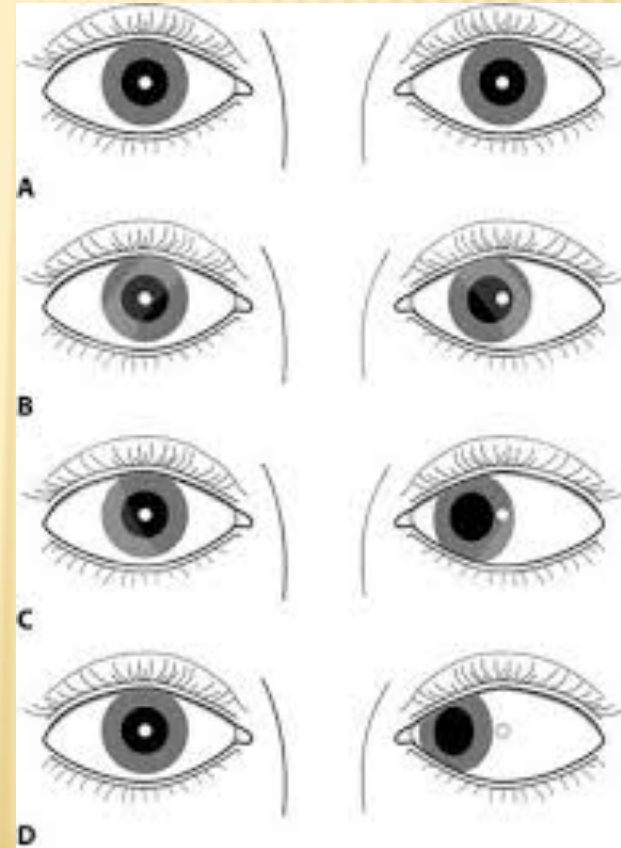
+ Hirschberg test



# MUSCLE BALANCE TESTING

Motility Assessment:

+ Hirschberg test

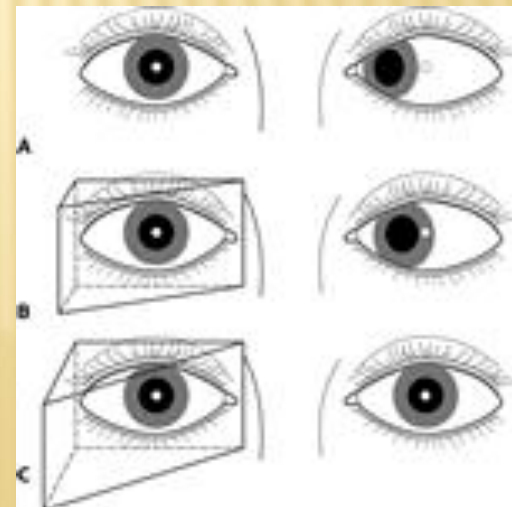


# MUSCLE BALANCE TESTING

## Motility Assessment:

### + Krimsky test.

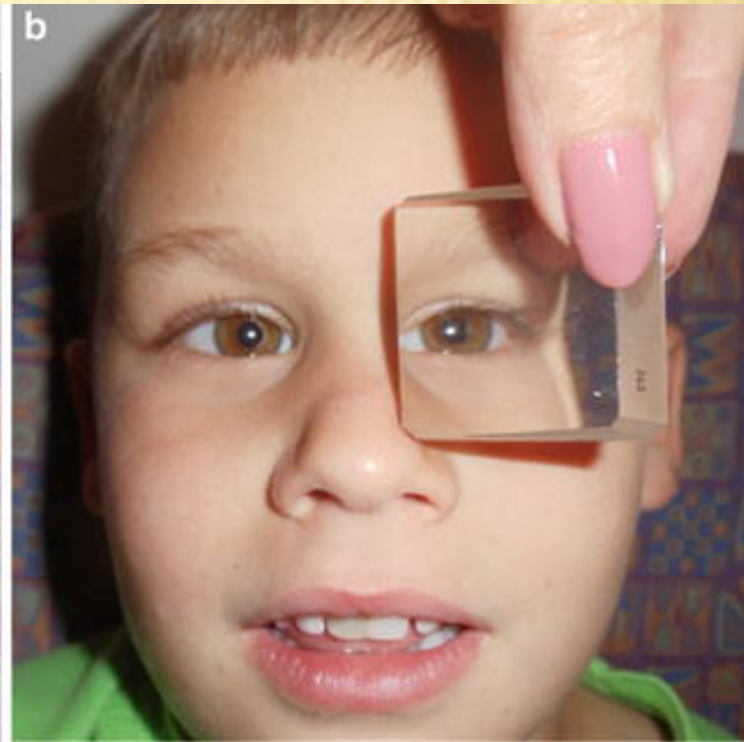
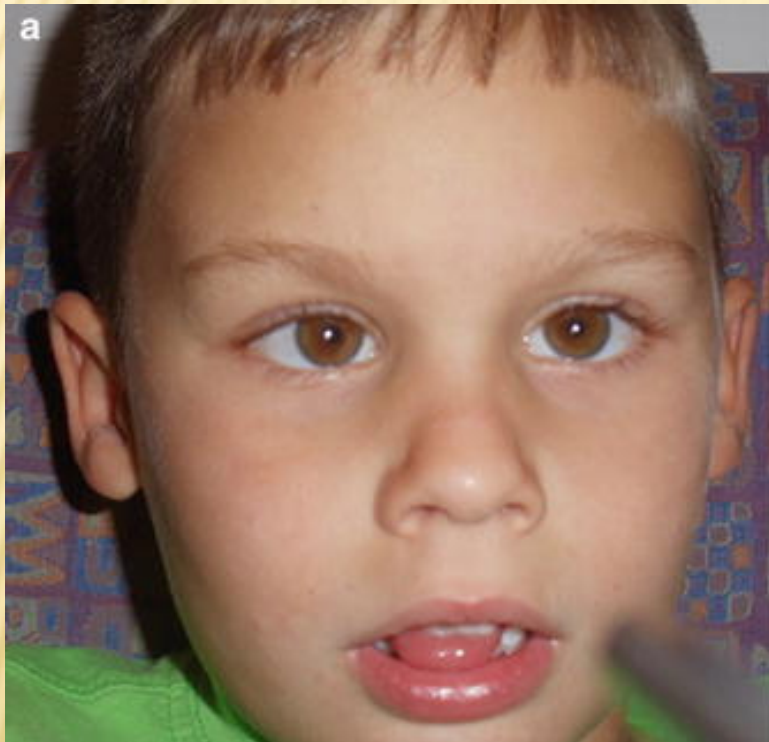
- × Similar to Hirschberg test
- × Prism is used to center corneal light reflex
- × Prism is changed until corneal light reflexes are symmetrically centered





# MUSCLE BALANCE TESTING

## Motility Assessment:

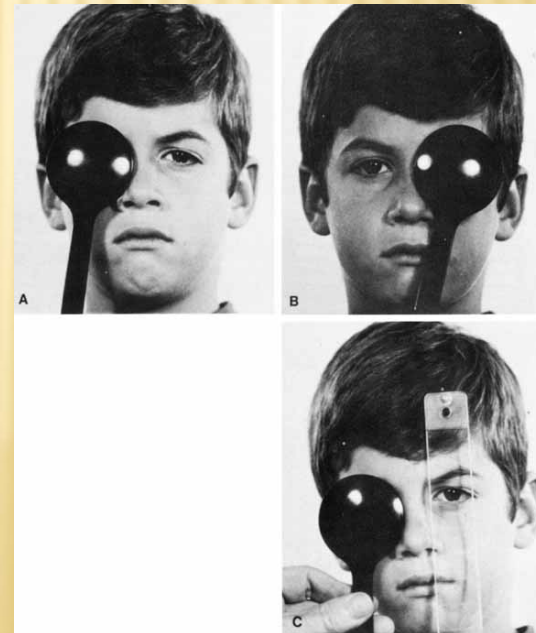
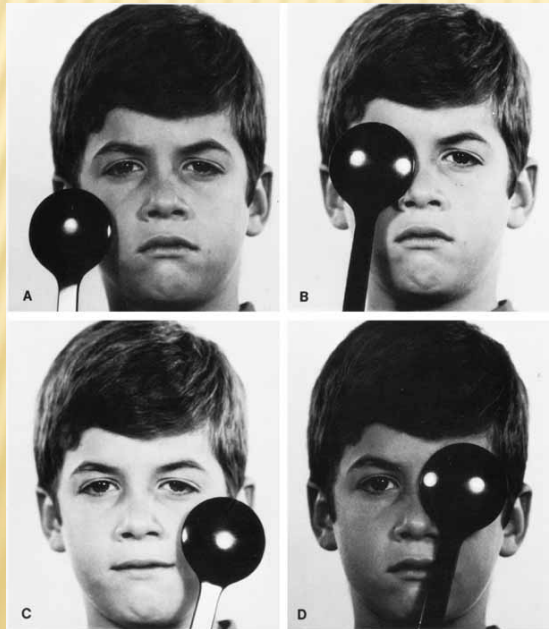


# MUSCLE BALANCE TESTING

## Motility Assessment:

### + Cover Test

- × Unilateral (cover/uncover) cover test
- × Alternating (cross cover) cover test

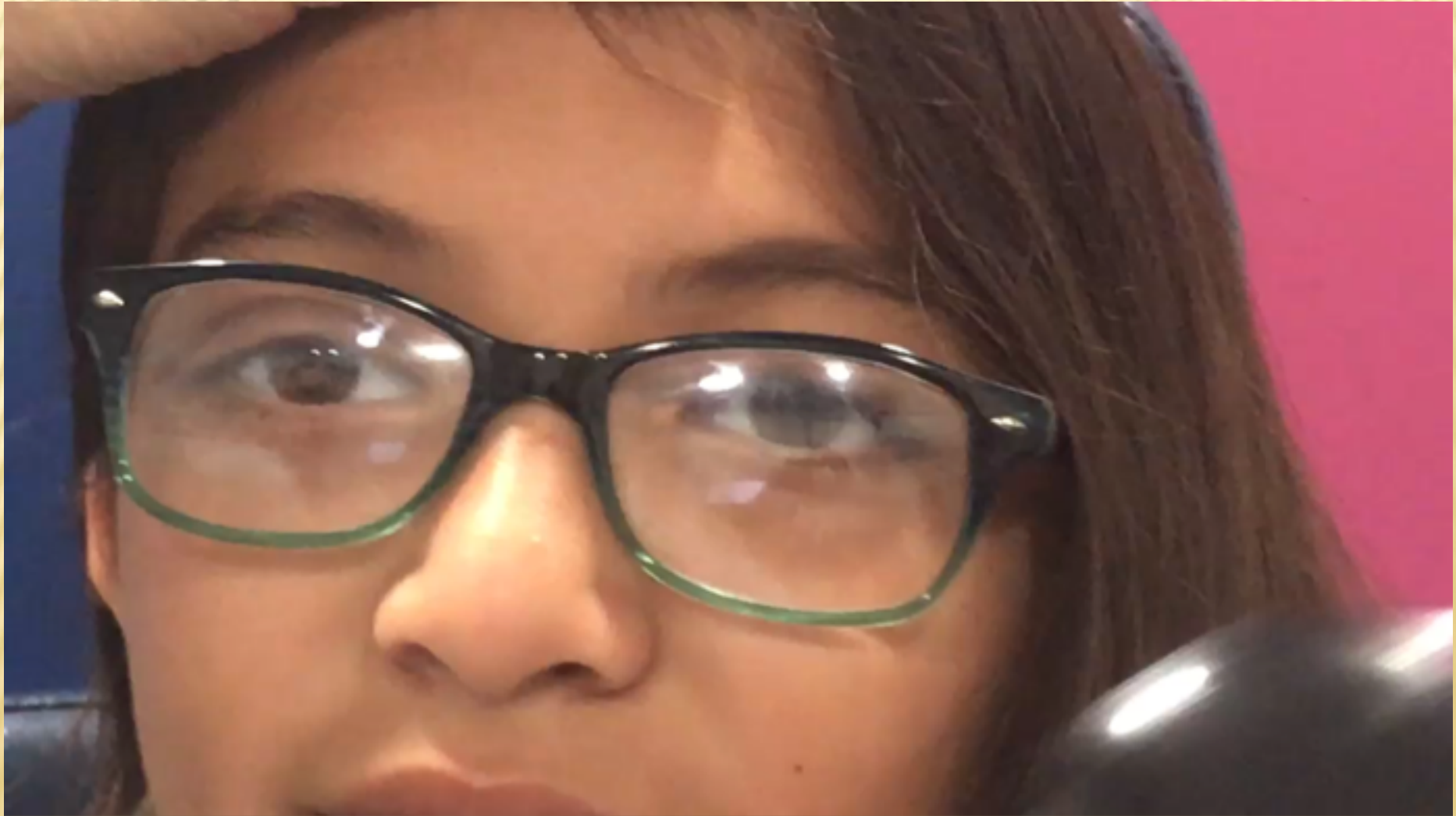


# VIDEO -





# VIDEO -



**VIDEO -**

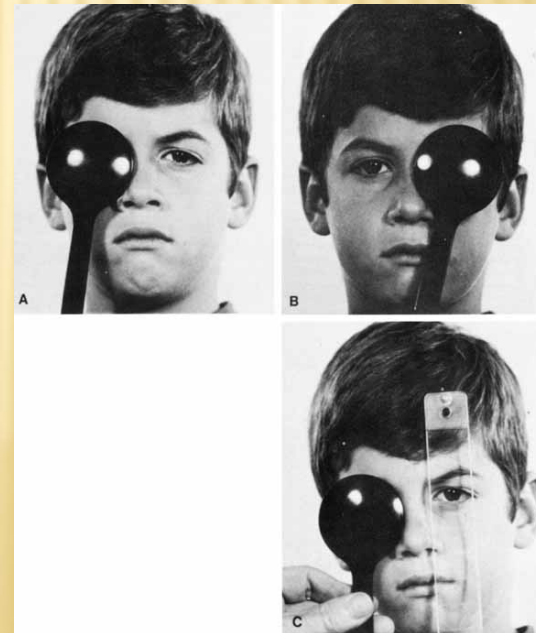
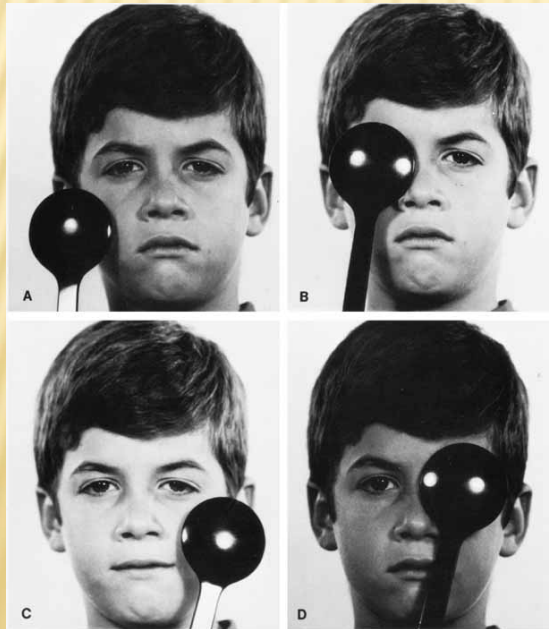


# MUSCLE BALANCE TESTING

## Motility Assessment:

### + Cover Test

- ✗ Unilateral (cover/uncover) cover test
- ✗ Alternating (cross cover) cover test





**VIDEO -**



VIDEO -



**VIDEO -**





# MUSCLE BALANCE TESTING

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## Motility Assessment:

### + Cover Test

- × Testing should be done in primary position initially
- × Fixation target determines success
  - ★ Distance
    - × Block letters
    - × Pictures
    - × Movie
  - ★ Near
    - × Stickers
    - × Toys
    - × Lights



# **The End!!**

**[nicholas.silvestros@ulp.org](mailto:nicholas.silvestros@ulp.org)**

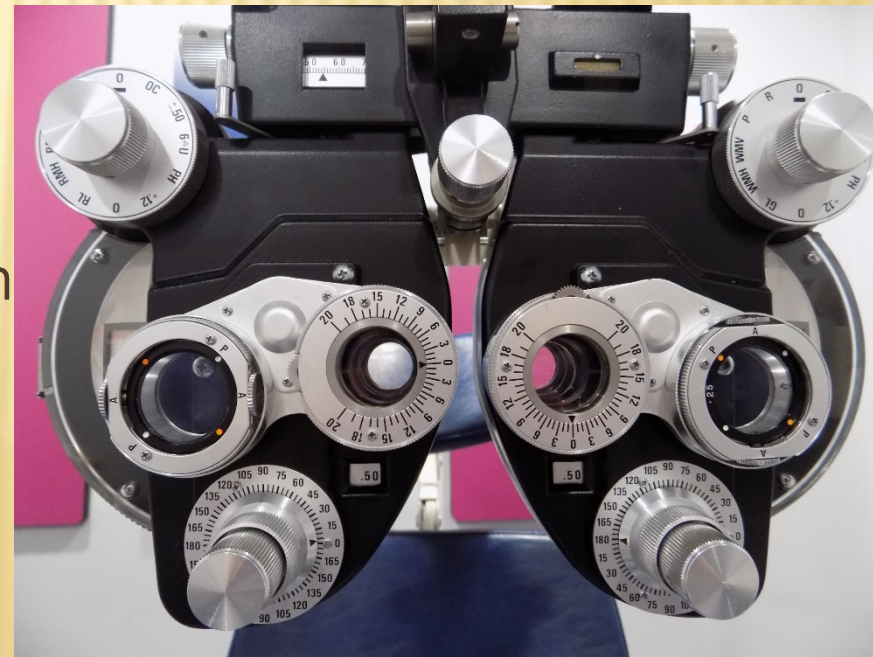


# PRISM WITH PHOROPTER

## Step One:

### + After refraction

- ✗ Ensure patient is looking through center of lenses
- ✗ Place one prism in place with no prism in it
  - ✗ Either vertical or horizontal depending on diplopia
  - ✗ Correct vertical first
- ✗ Put one letter on the screen
  - ✗ I like block letters
    - ✗ H, T

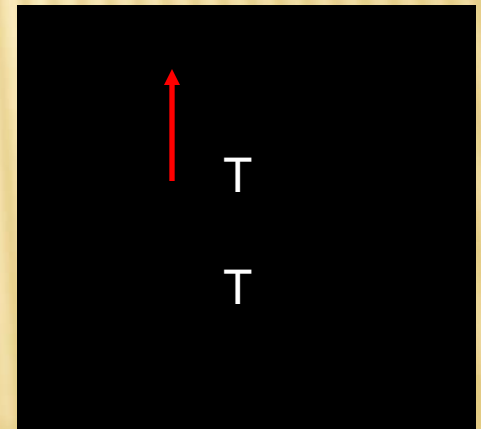
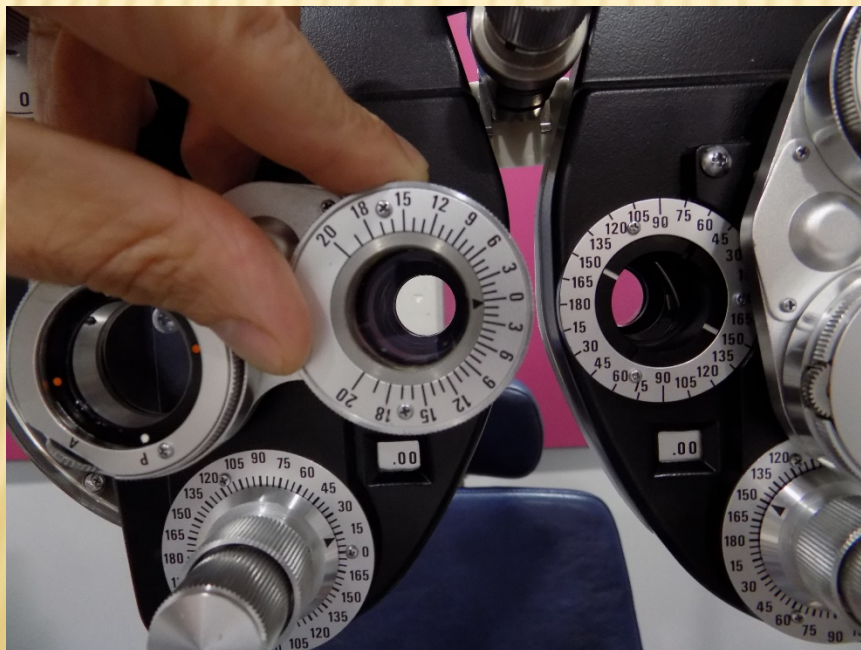




# PHORIAS WITH PHOROPTER

Step Two:

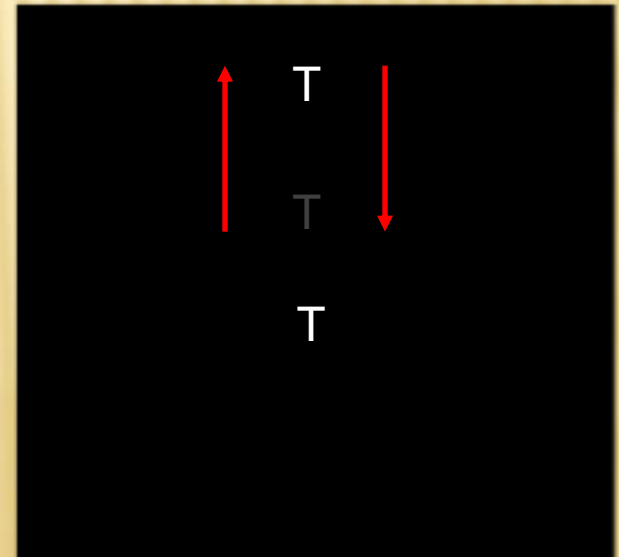
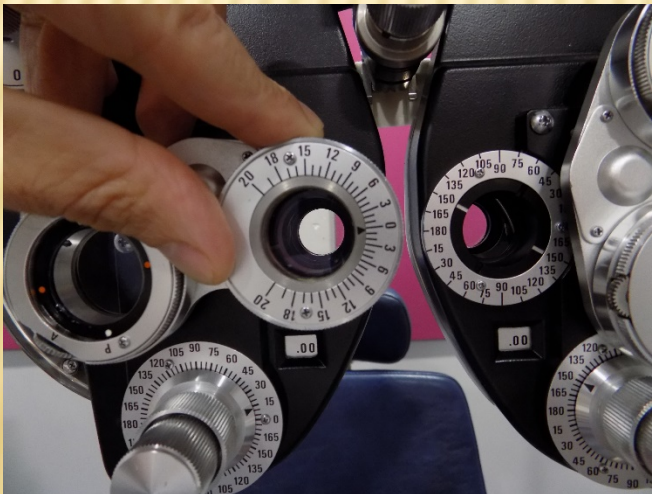
- + Using the vertical prism lens
  - × Patient should see two letters
  - × Start moving imagine in opposite direction



# PHORIAS WITH PHOROPTER

## Step Three:

- + Using the vertical prism lens
  - × Patient should see two letters moving apart
  - × After you move them apart change direction of prism to bring it back to starting position – Zero on Risley Prism

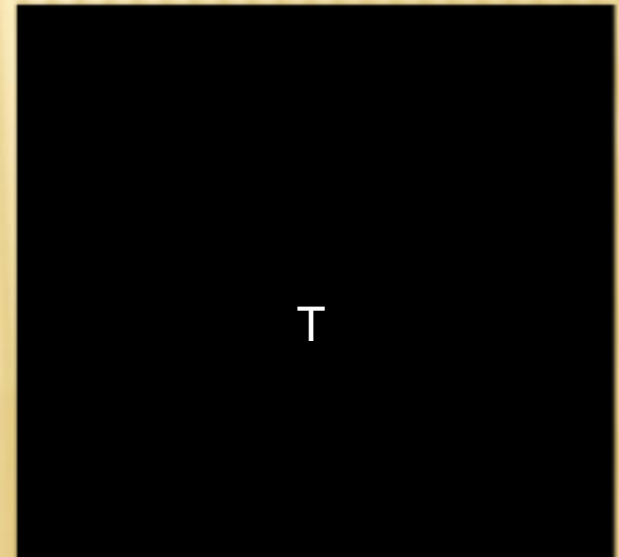
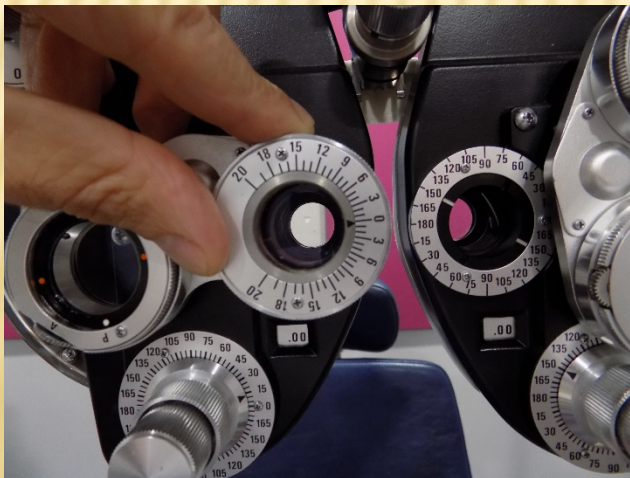




# PHORIAS WITH PHOROPTER

Step Four:

- + Using the vertical prism lens
  - × Patient should see two letters moving towards each other
  - × Continue until they see one letter
  - × Remember this number

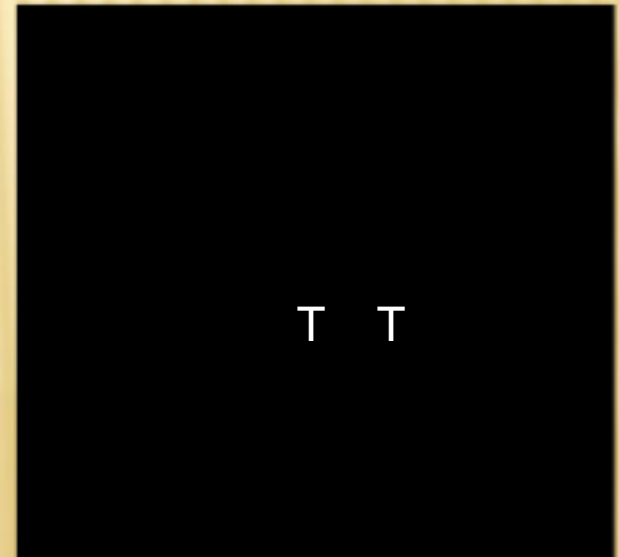
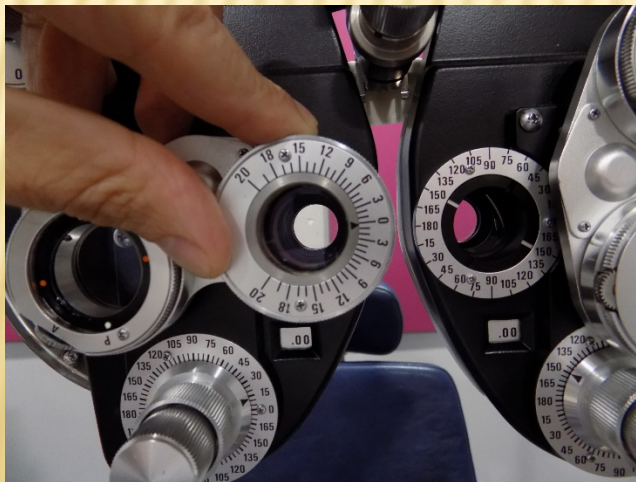




# PHORIAS WITH PHOROPTER

Step Four:

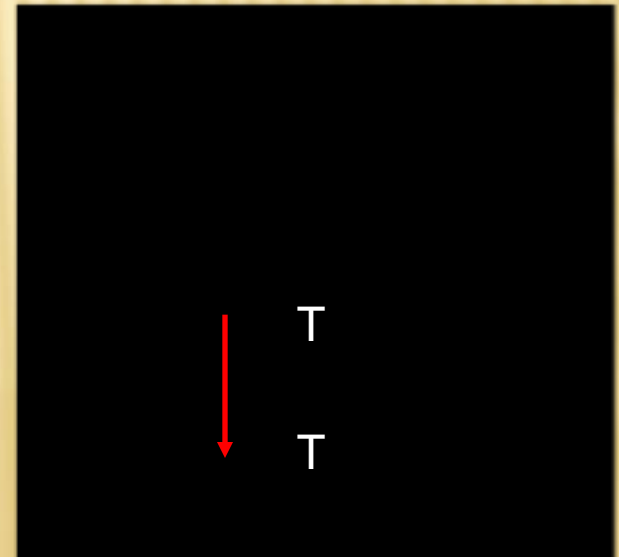
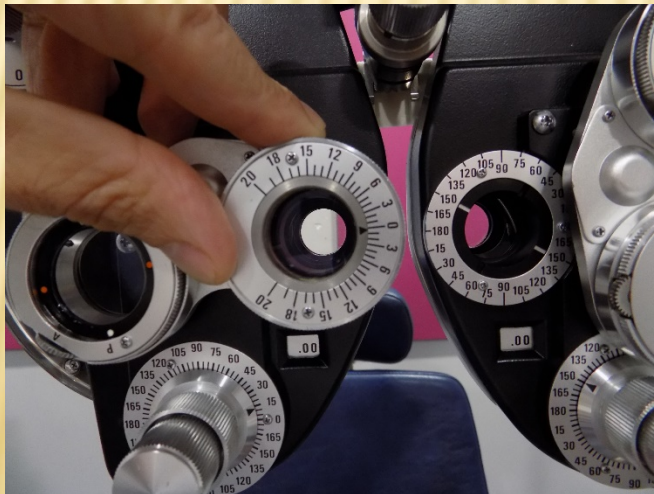
- + Using the vertical prism lens
  - × Patient should see two letters moving towards each other
  - × Continue until they see letter side by side
  - × Remember this number



# PHORIAS WITH PHOROPTER

Step Five:

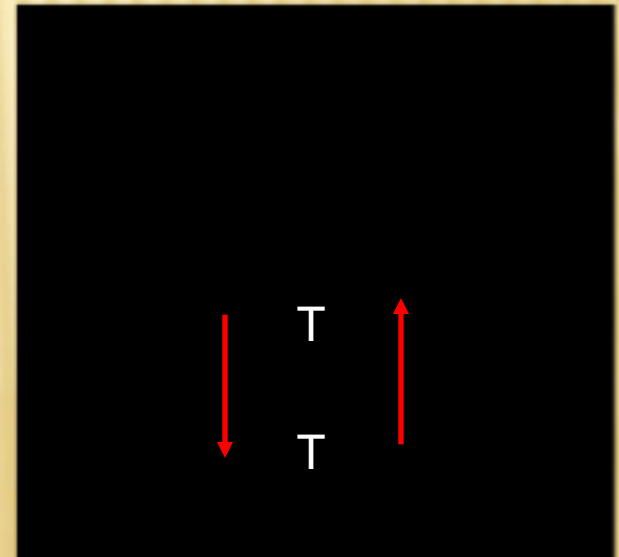
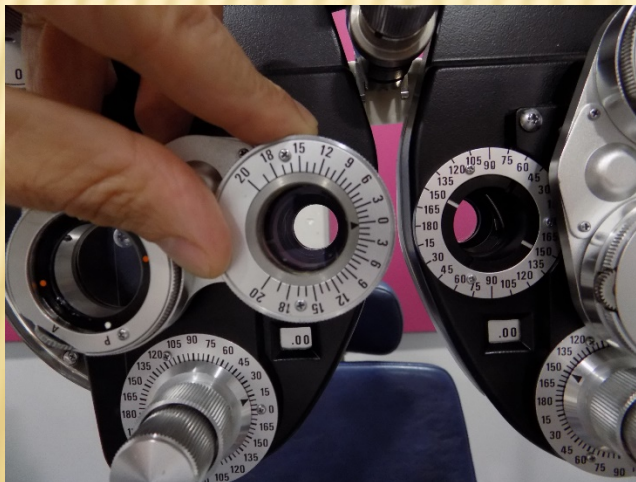
- + Using the vertical prism lens
  - × Patient should see two letters moving apart again
  - × Continue past single or side by side position by moving image in opposite direction



# PHORIAS WITH PHOROPTER

Step Five:

- + Using the vertical prism lens
  - × Patient should see two letters moving apart again
  - × Change direction of prism to bring it back to single
  - × Compare these numbers

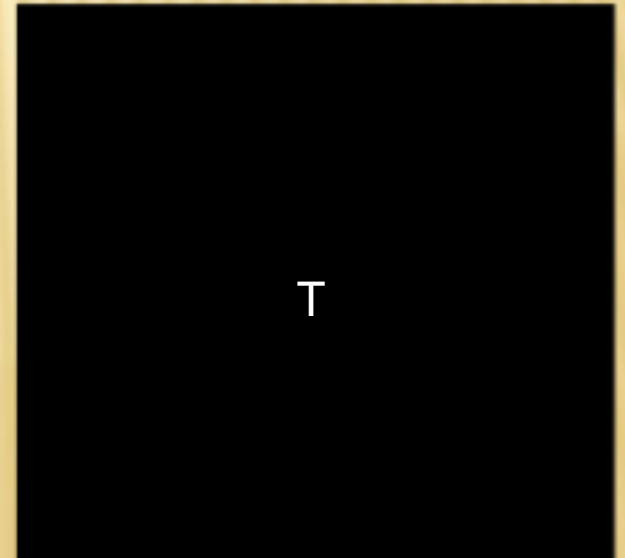




# PHORIAS WITH PHOROPTER

Step Six:

- + If single letter with consistent prism measurement
  - ✗ Prescribe by splitting prism equally between lenses
- + In not consistent prism measurements
  - ✗ Repeat process until consistent



# PHORIAS WITH PHOROPTER

Step Six:

- + If letters now side by side
  - ✗ Repeat process by adding horizontal Risley prism to other eye

