

Ophthalmology SAQ

By: 430 Ophthalmology team

Strabismus, Amblyopia, Management and leukocoria

Done by: Nora AlRajhi

❖ **Note: please refer to the original lecture given by the doctor**



The pictures were sorted by:

- Sara Mohammad Al-Shehri
- Marwah Salem Bafadel
- Ahlam Abdullah Al-Sulaiman
- Lamis Atyah Al-Malki

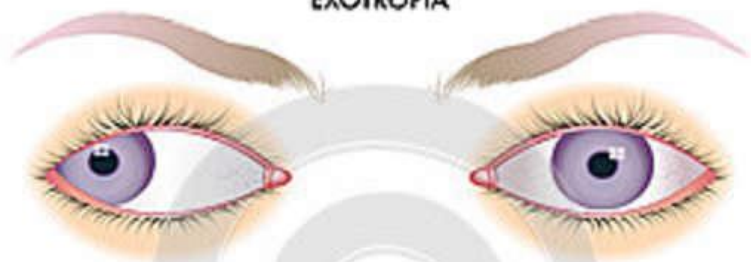
DISCLAIMER

- In order to diagnose a condition correctly you must read the history carefully, the picture alone is not enough to diagnose. So don't count on them, they might get you the same photo with a different history making it a different disease/condition and diagnosis.

ESOTROPIA



EXOTROPIA



HYPERTROPIA



HYPOTROPIA



Pseudoesotropia



Because the light is reflecting centrally in both eyes

Infantile esotropia



Accommodative Esotropia



Partially Accommodative Esotropia



Intermittent exotropia



Constant exotropia



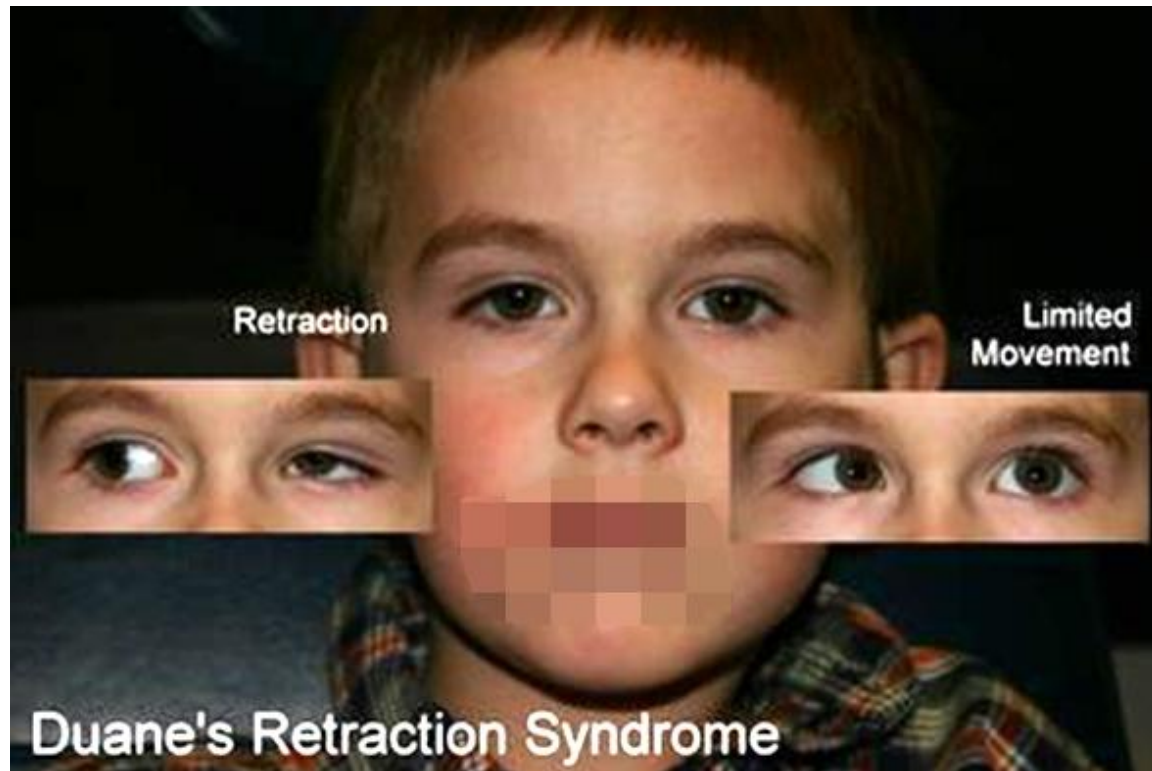
6th Nerve Palsy



3rd Nerve Palsy



Duane Syndrome



Brown Syndrome



Figure 1 - The nine positions of gaze, boy

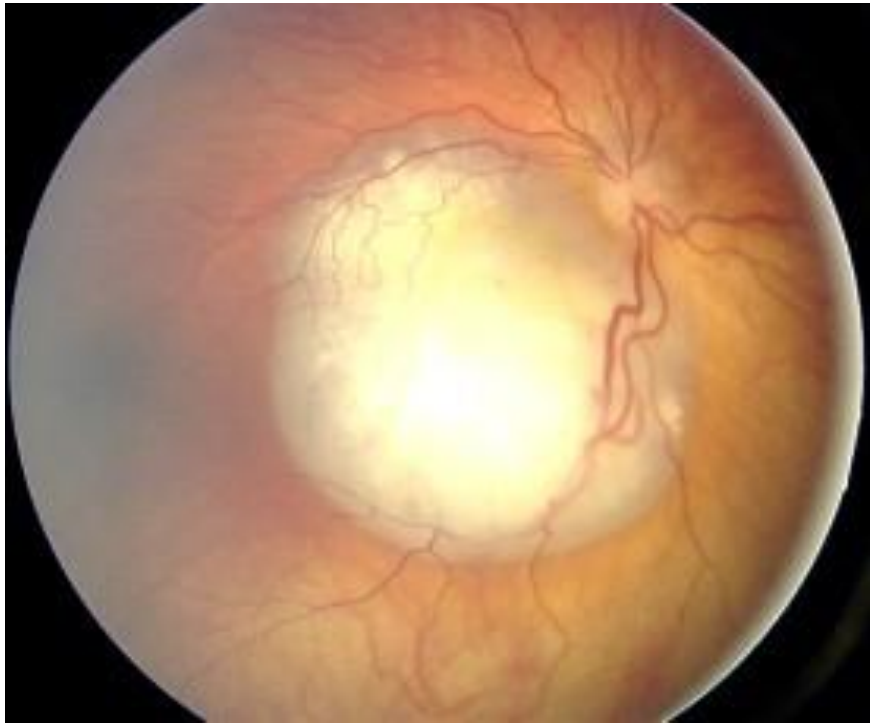
Thyroid Ophthalmopathy



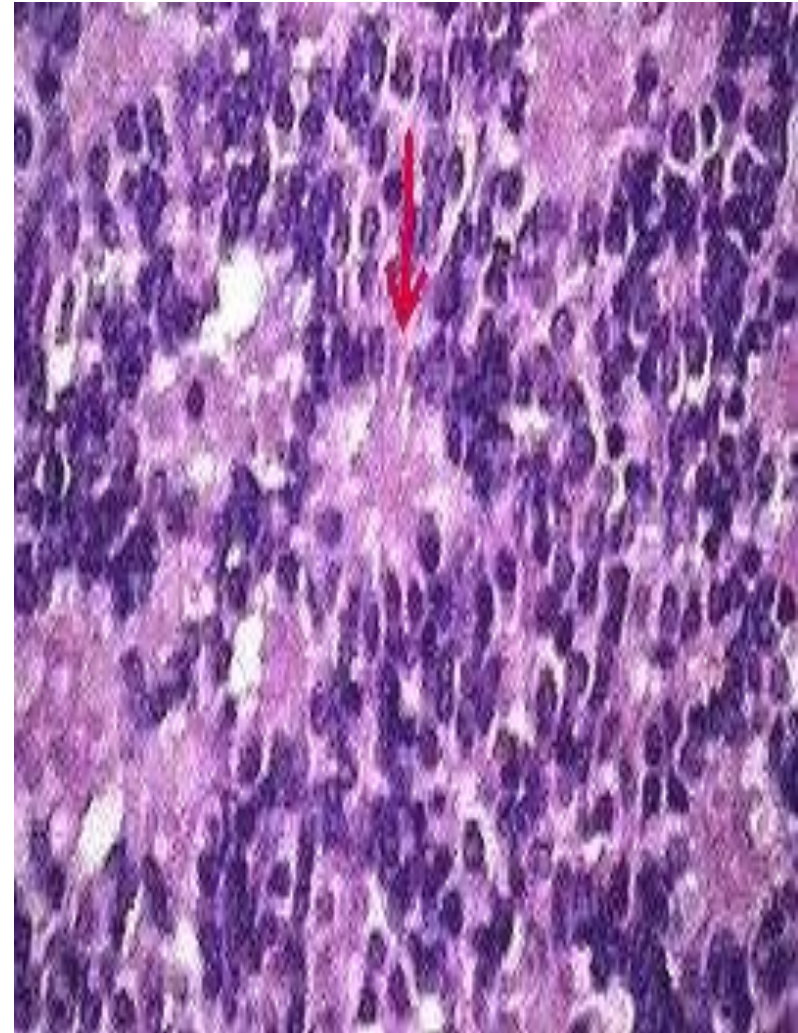
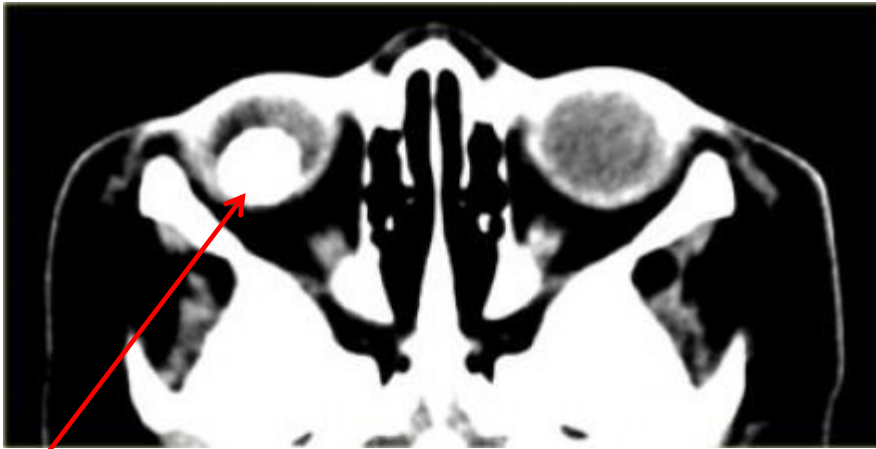
Luekocoria



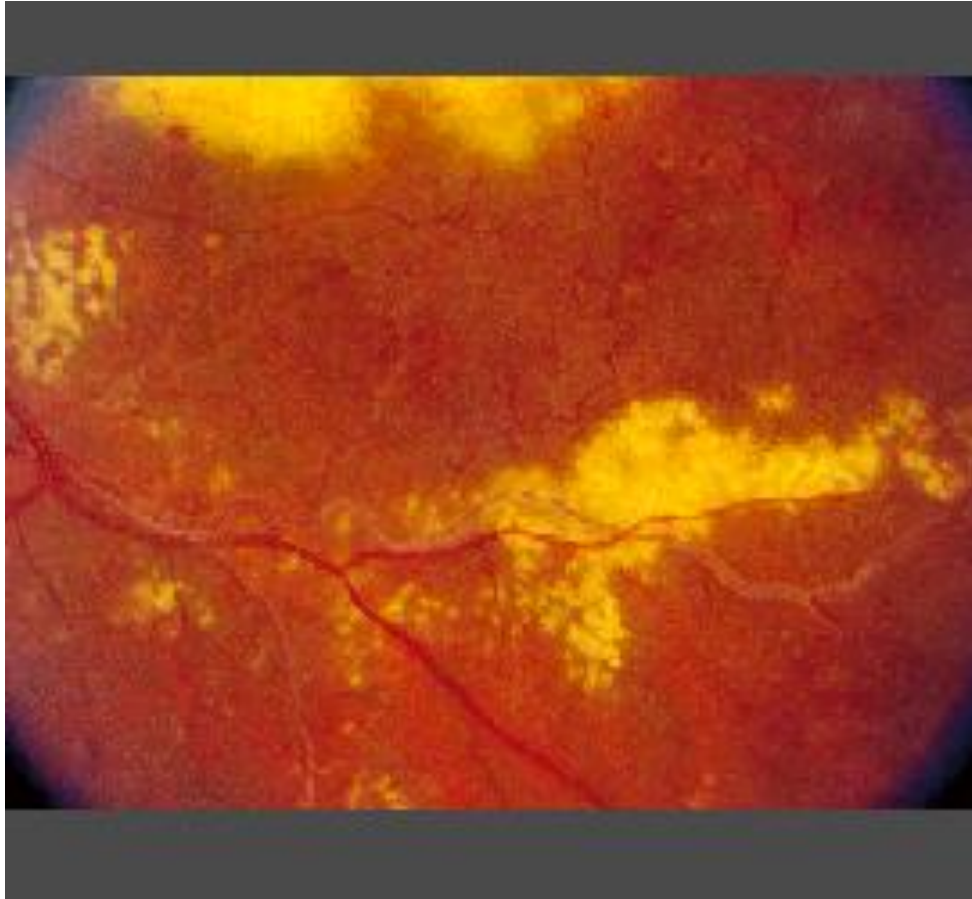
Retinoblastoma



Retinoblastoma



Coat's disease



Persistent hyperplastic primary vitreous

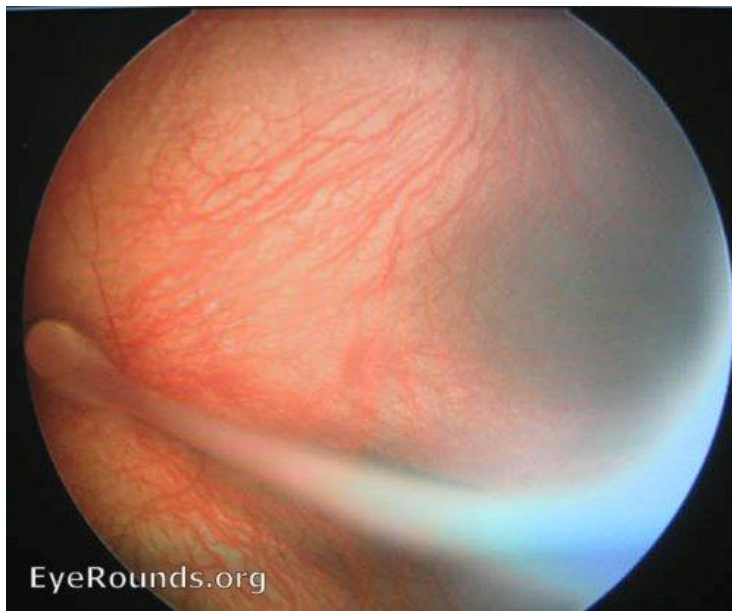
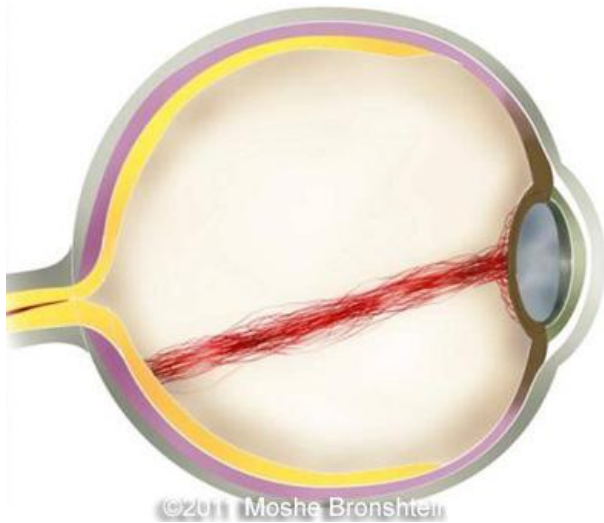
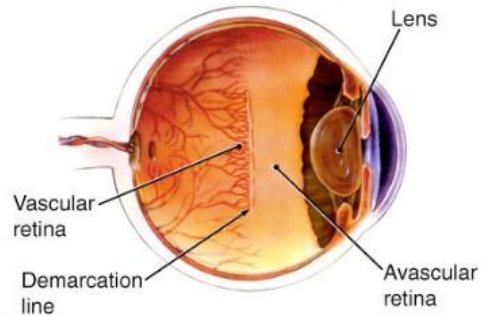


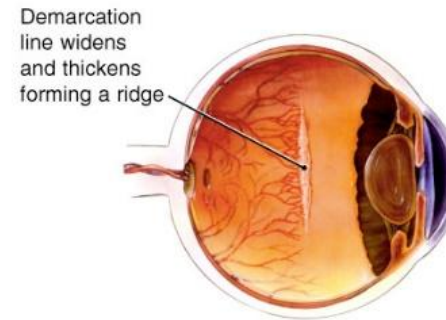
Figura 5. Corte tomográfico axial de um portador de PHVP no globo ocular direito revela aumento generalizado da densidade intravítrea, lente de configuração arredondada e câmara anterior pequena, rasa. Observa-se, ainda, área de maior densidade de configuração triangular (seta), característica de PHVP.

RETINOPATHY OF PREMATURITY

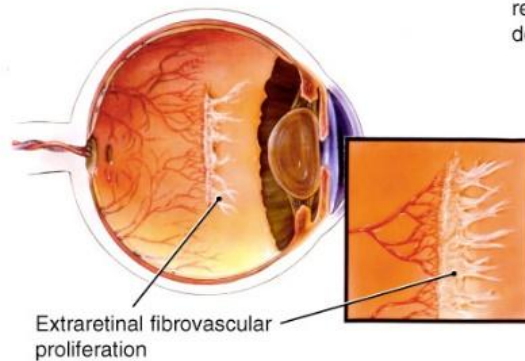
STAGE ONE



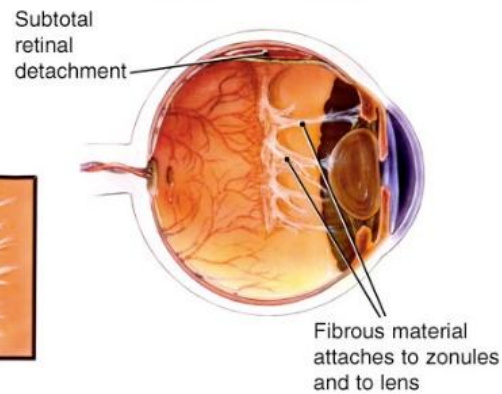
STAGE TWO



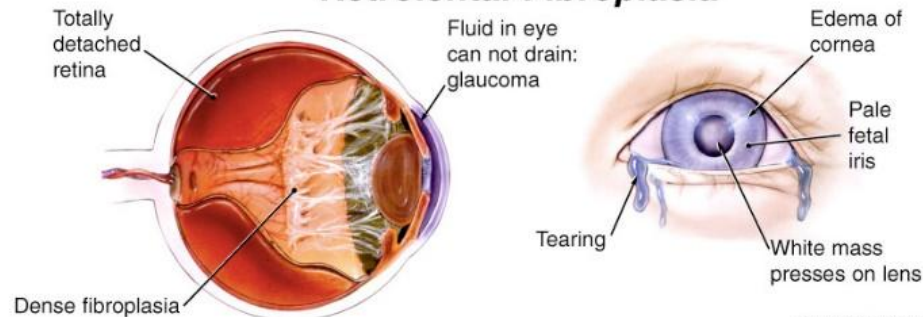
STAGE THREE



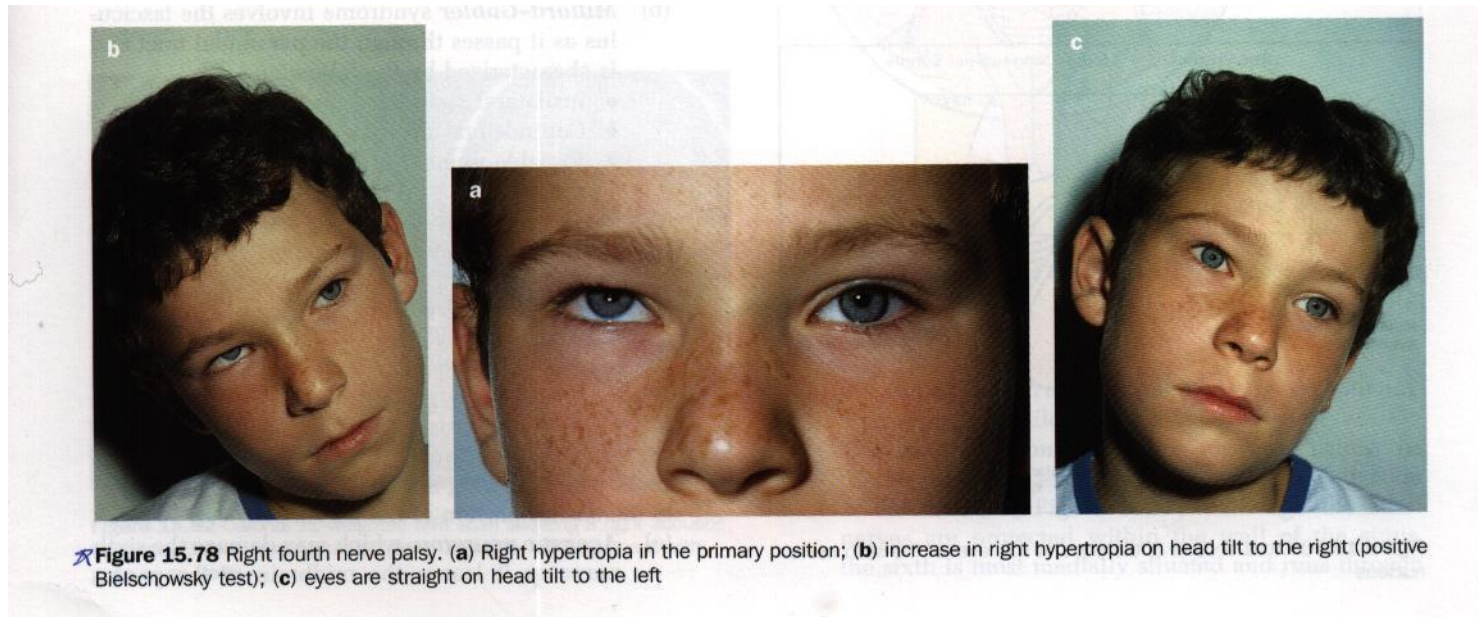
STAGE FOUR

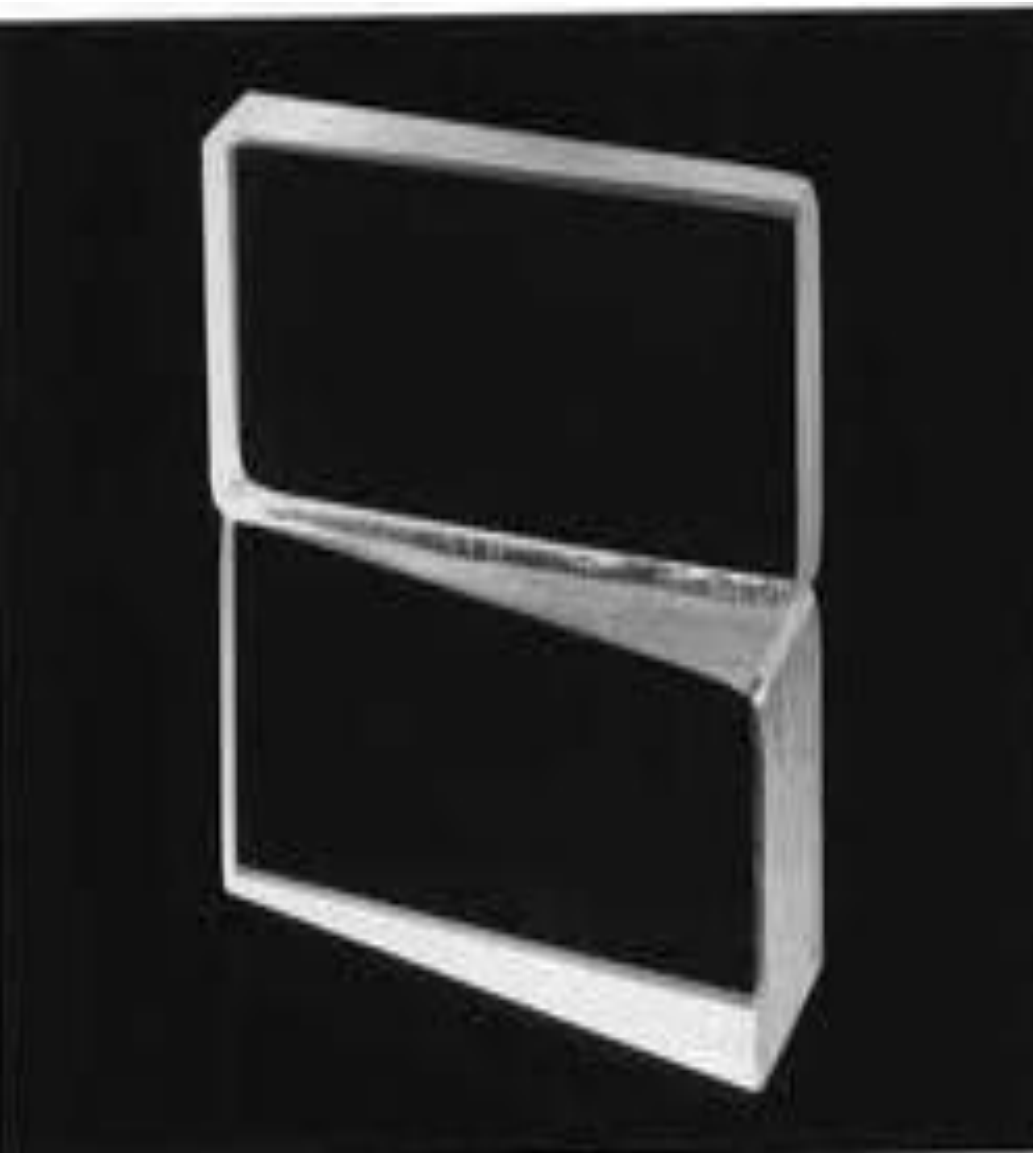


STAGE FIVE RETINOPATHY “Retrolental Fibroplasia”



Right 4th nerve palsy





1- INSTRUMENT ?

Prism

2- value ?

Test eye deviation (strabismus)

- Based on this photo what is your diagnosis?

Pseudostrabismus.

- What is the cause?

Large epicanthal fold.

Notice the symmetrical light reflex.



- Please diagnose this patient
Rt eye exotropia.
- What type of surgery would you suggest for treatment?

Lateral rectus weakening.

Medial rectus strengthening.





- Left Exotropia.

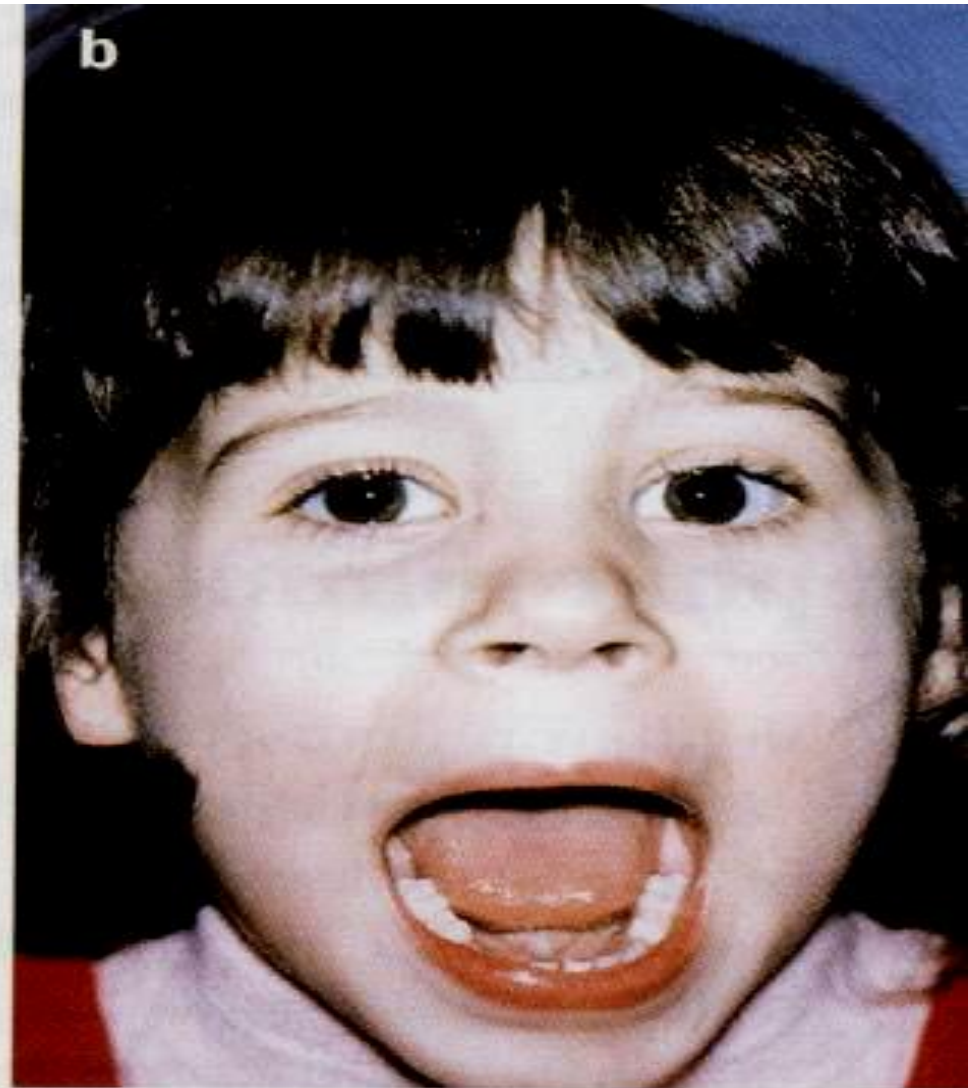
This patient has pseudostrabismus, all of the following is true except:

- a) Rt eye is deviated inward
- b) Central light reflex
- c) Prominent epicanthas fold
- d) Pt. improves when he grows up
- e) Cover and uncover test are normal





- Marcus-Gun Jaw Winking Syndrome.
- - Stimulation of the pterygoid activates the levator palpi. Super. Of the same side.



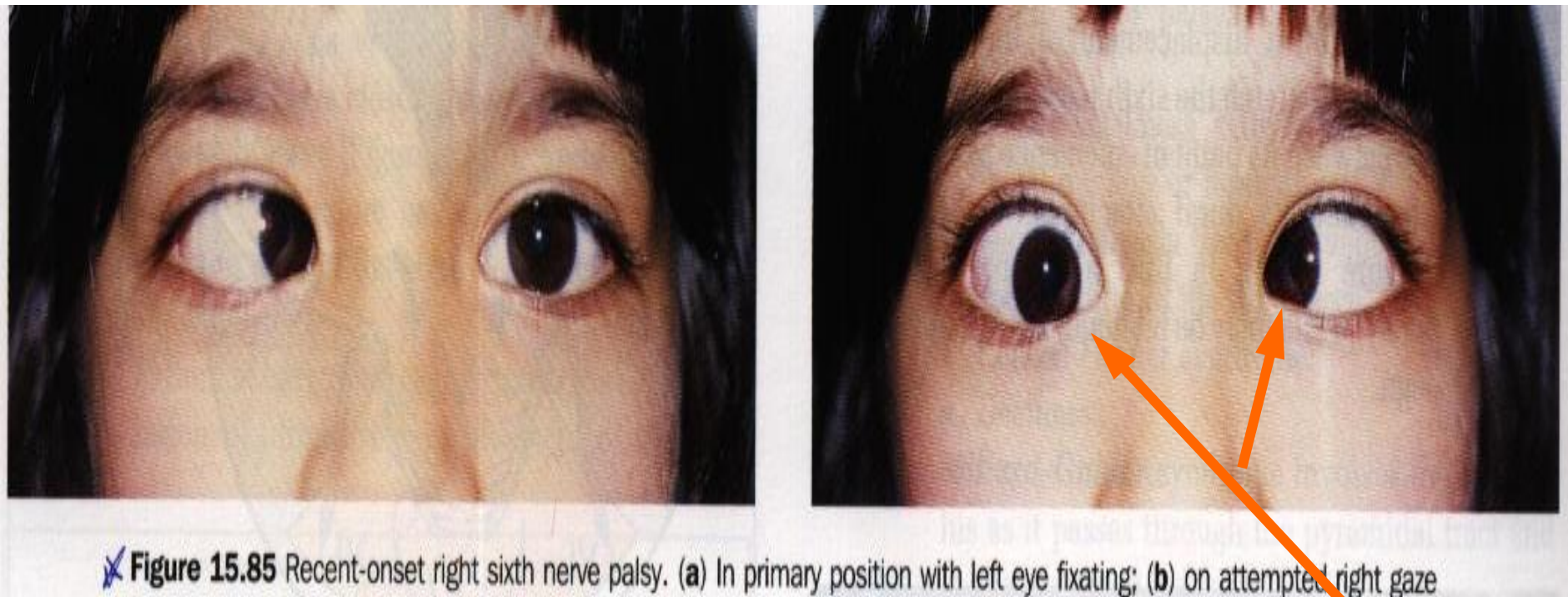
- Marcus-Gun Jaw Winking Syndrome.
- Stimulation of the pterygoid activates the levator palpi. Super. Of the same side.

Part 1



- if you are told that this child is looking forward, then the dx would be:
- Alternating Strabismus.

Part 2



- But if you are told that she is trying to look to the left :
- Right 6th Nerve Palsy.



- Duane Syndrome?

- What is the doctor using on this patient?
 - Prism
- What is it used for?
 - It is used to measure eye deviation





- Leukocoria in a child.
- Your diagnosis should be RETINOBLASTOMA until proven otherwise.



- Buphthalmus (Rt.) =
Congenital Glaucoma.



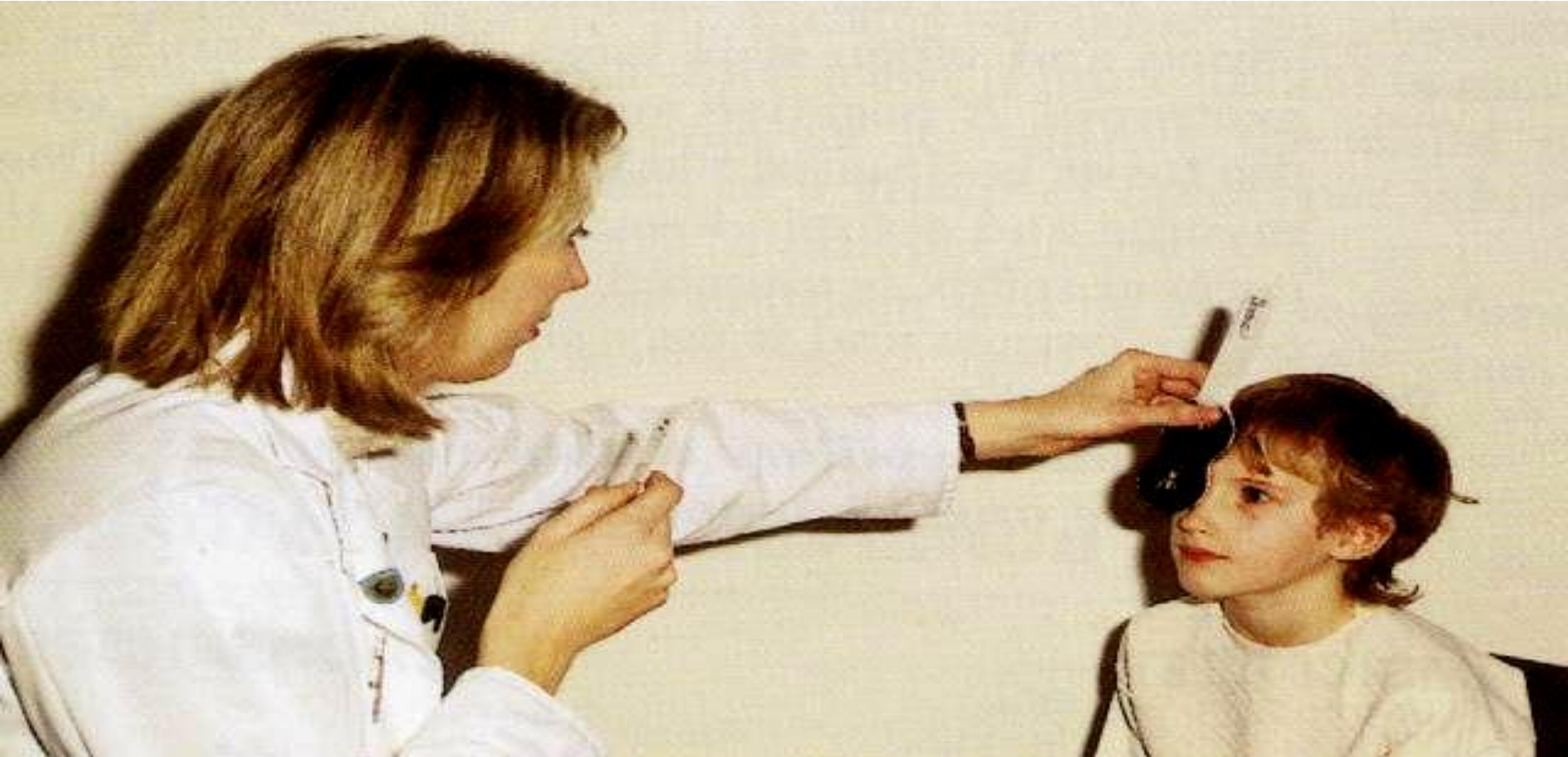
- Pseudostrabismus. (large epicanthal fold)
- No treatment is needed. You must differentiate it from true misalignment by the corneal light reflection appearing on the center of the pupil of each eye when the child fixes a light.



- Left esotropia.
- Exclude Retinoblastoma (20% presents with Strabismus)
- Tx: Surgery. Medial and lateral rectus recession.



- Right esotropia.



- Cover test

All of the following are true except:

- a) Right reflex is central
 - b) Right eye deviated inward
 - c) He has prominent of epicanthal fold
 - d) The problem will resolve with growing up
- The diagnosis here is pseudostrabismus



This presentation is seen in all of the following except:

- a) Congenital cataract
- b) Diabetes mellitus
- c) retinoblastoma
- d) Retinopathy of prematurity
- e) Retinochoroidal coloboma

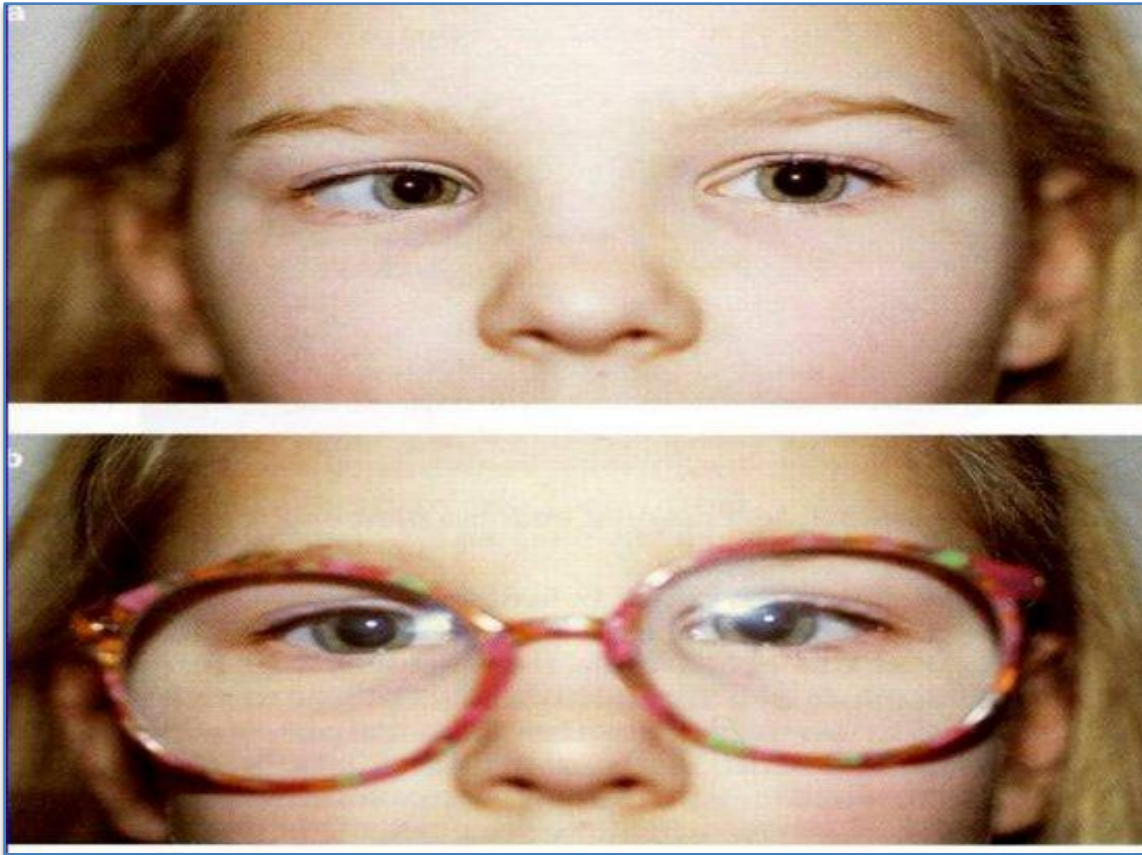


All of the following are true except:

- a) He has esotropia in the right eye
- b) Can be corrected by glasses
- c) Surgery can be done after amblyopia is corrected
- d) Usually associated with myopia
- e) Exclude retinoblastoma



Esotropia is usually associated with hypermetropia



- **Q. What is the diagnosis?**
- **A. Accommodative esotropia in the right eye.**

- **Q. Which type of refractive error is associated with this condition?**
- **A. Hyperopia.**



- **A 2 year old child presented with this condition**
- **Q. What is this sign?**
- **A. Leucokoria in the right eye.**
- **Q. Mention 2 differential diagnoses.**
- **A. Congenital cataract, retinoblastoma.**

- What is the positive finding in this patient?
Leukocoria

- Name 2 differential diagnosis?
Coat's disease (rare),
congenital cataract,
retinoblastoma,



➤ 3 year old boy on his routine visit to the ophthalmology clinic

1. What is this patch for?

✓ To prevent amblyopia in the left eye (weaker)

2. Mention 2 possible causes?

✓ Anisometropia and strabismus



- What is the diagnosis?

Leukocoria of the right eye

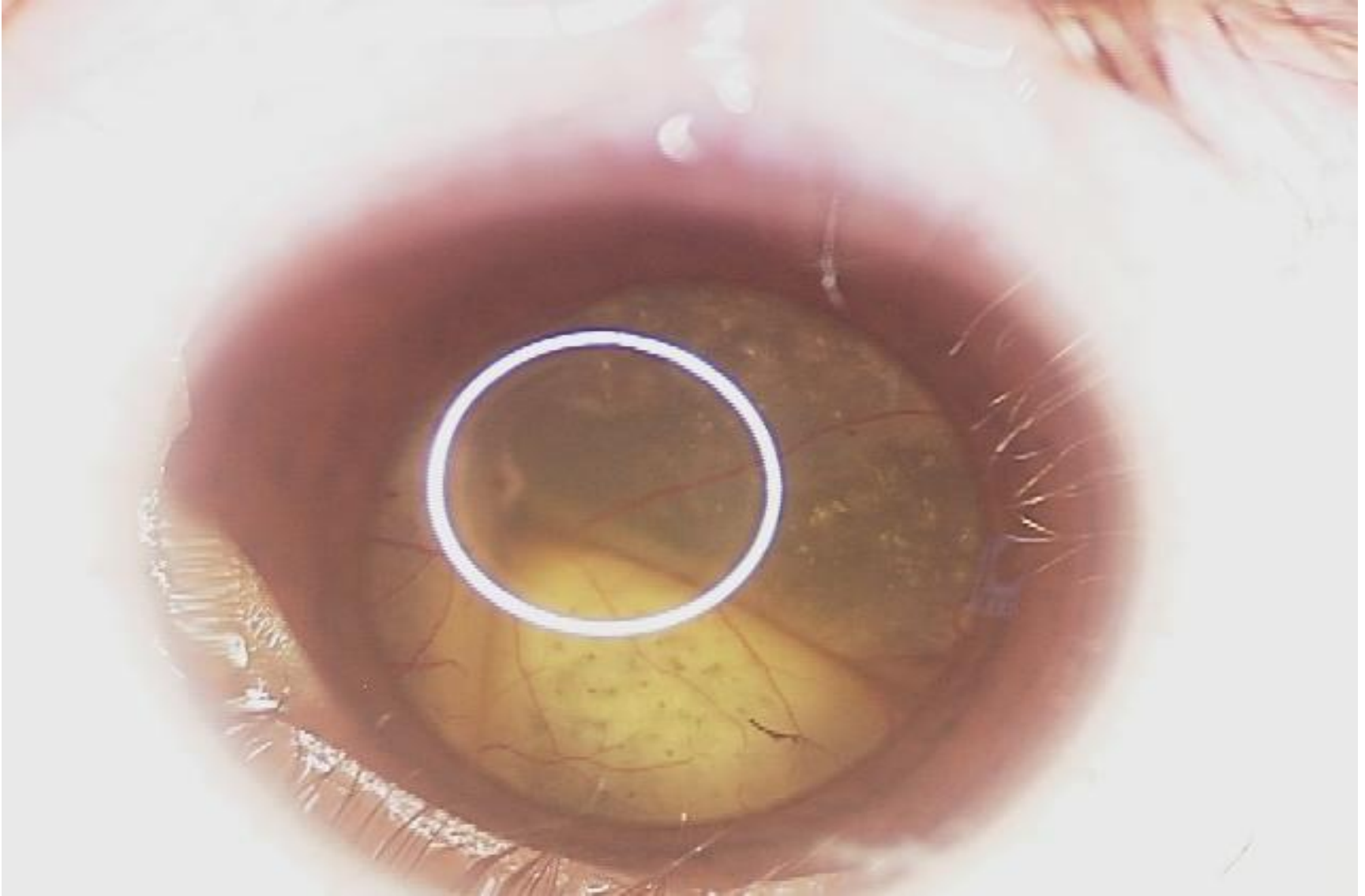
- Mention 2 causes.

Retinoblastoma –
congenital cataract –
retinopathy of
prematurity.





- What is this instrument?
 - ✓ Prism
- What is it used for?
 - ✓ Measure the degree of deviation (strabismus)

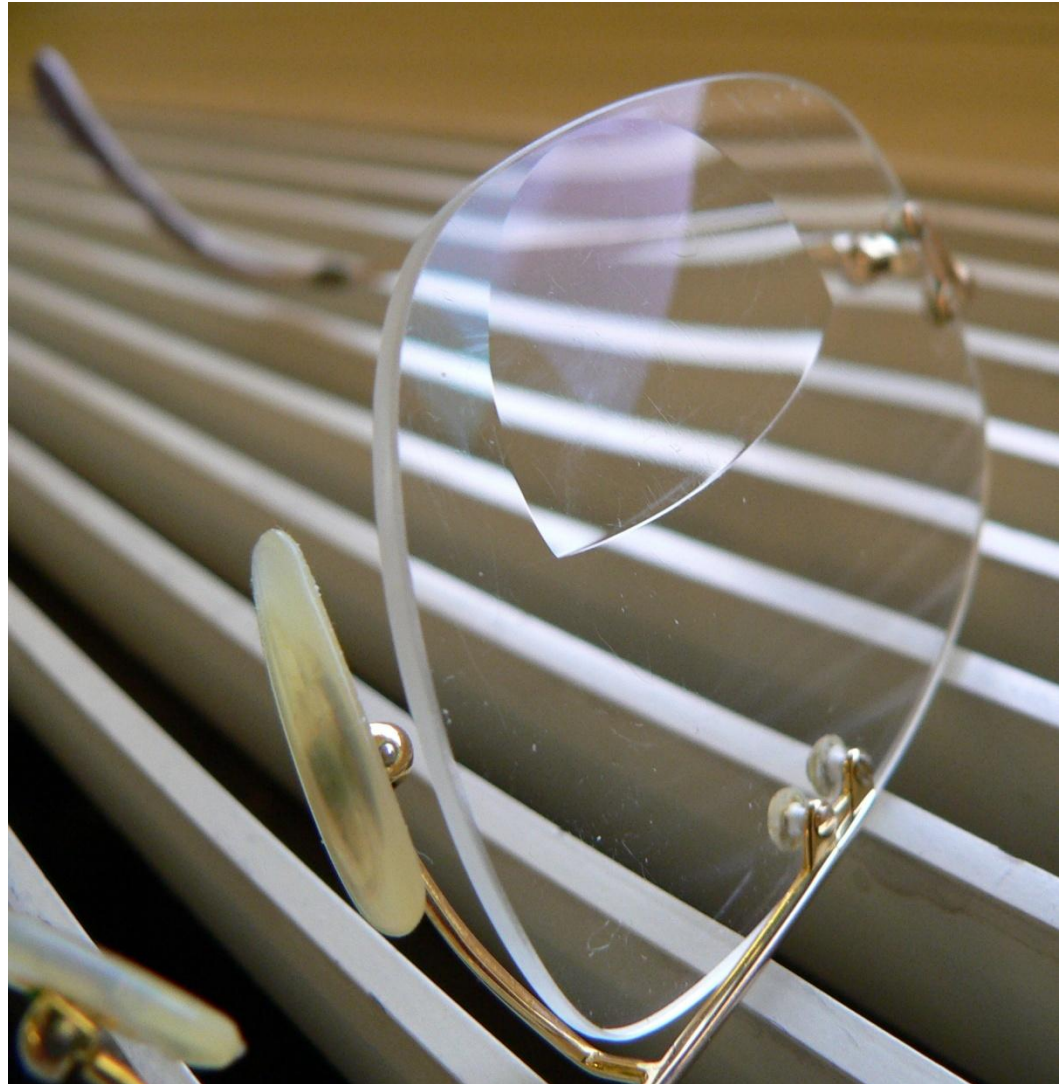


2-year-old boy with exotropia for 6 months.

- A) What is the most likely differential diagnosis (mention 2)?
- B) What is the most useful ancillary test to help you in diagnosis in this case?

How to identify a
cylindrical lens:
there will be 2
white lines on its
frame:

Q: This lens is used to
correct?
astigmatism.



- This young guy came to the ER with a history of trauma by a fist, what is your diagnosis?
- a) 4th nerve paralysis in the R. eye
 - b) 4th nerve paralysis in the L. eye
 - c) Blow out fracture in the R. eye
 - d) 3rd nerve palsy in the R. eye



- According to this condition, all true EXCEPT :
 - a) The light reflex is central
 - b) The L. eye is deviated inward
 - c) He has a prominent canthal fold
 - d) He will be okay when he grows up



This is a psuedostrabismus, so the light reflex is always central and there is no deviation in the eyes as in the true strabismus



1. What is the diagnosis?

3rd nerve palsy in the right eye

2. Mention 2 investigations you would like to order?

MRI - CT

1. What is the diagnosis?

Facial nerve palsy
(LMNL) in the right side

2. Mention 2 ocular signs ?

- Ectropion
- Exposure keratitis





1. What is the positive finding in this picture?

Leukocoria in the left eye

2. Mention 2 differentials?

- Retinoblastoma

- Cataract

- Retinopathy of prematurity

???



???

