Eye examinations and history taking 4th year

Eye history taking

https://youtu.be/ZE0m9M5r9g0?si=rdTzyCxWp-MTKo19

Biodata - NASAO

- Name
- Age
- Sex
- Address
- Occupation

Chief complaints - DOPARA

- Duration
- Onset
- Progression
- Aggrevating factors
- Relieving factors
- Associations

Past ocular history - GSTMIL

- Glasses
- Surgery - any ocular surgery e.g. Cataract, glaucoma, squint etc
- Trauma
- Medications - ocular medications
- Injections - into eye e.g. Anti VEGF, peribulbar, Intravitreal
- Laser

Past medical history

- Diabetes
- HTN
- Asthma
- Joint diseases - rheumatoid arthritis SLE
- Ischemic heart disease
- TB

Family history

- Glaucoma
- Congenital cataract
- Retinitis pigmentosa
- Squint

Personal history

- Smoking

- Alcohol
- Tobacco use

Sexual history
- Syphilis
- AIDs

Drug history
- Systemic drugs like steroids, immunosuppresants

Digital Tonometry

https://youtu.be/zFzNLz7qcfw?si=JHN_AsS8W5F9HBQh

With both index fingers, check the orbit alternating from one index finger to the other

Normal eyeball is firm like tip of nose
Soft eyeball feels like lip
Hard eyeball like glabella

Visual acuity test

- Introduction
- Consent
- Ask patient whether he or she is literate
- Ask patient whether he or she uses glasses
- Make sure whether distance between patient and snellen chart is 6m
- Ask patient to wear trial frame and occlude one eye
- Check visual acuity of one eye and record it properly
- Check visual acuity of another eye and record it properly
- Check visual acuity of both eyes separately with a pinhole and record it properly
- Check visual acuity with glasses if the patient wears glasses

Visual field exam by confrontation method

https://youtu.be/_HwWfnB0nBg?si=kf93saGXWpbxq_L5

- Introduction
- Consent
- Check gross visual acuity of both eyes separately (covering one eye alternatively)
- Ask patient whether he or she can see examiner's face completely or there is missing eye
- Ask patient to close one eye and also close his/her opposite eye

- Ask patient to look into his/her open eye
- Ask patient that i will bring my wriggling fingers from outside to inside, you have to say yes when you see finger whole looking into my open eye
- Bring wiggling fingers from 4 quadrants
- Check blind spot
- Repeat same steps for other eye

Cover uncover test

https://youtu.be/pAu8YLEonPY?si=2TQTuWz-welvYDtg

Cover test for tropias
Uncover test for phorias

- Introduction
- Check gross visual acuity by showing fingers to count
- Give a distant straight away target to patient
- Cover one eye and look for movement in other eye of patient
- Repeat same for second eye
- Now uncover one eye and look for movement in uncovered eye
- Repeat same for other eye
- Now alternatively cover/uncover each eye and look for any movement in either eye
- Repeat/ mention to repeat above all steps for near target

Extraocular muscle movement

https://youtu.be/QiUip8bIlJs?si=6V-TgJJ3o9OxcfXo

- Introduction
- Check gross visual acuity
- Check movements in primary position of gaze by making H through eye
- Check Sachidic movement - ask patient to look from one object to another without moving his head
- Check vergence (convergence and divergence) - ask patient to look at distant object, then look at distant placed finger and move it closer to eyes (change from divergent to convergent)

Pupillary light reflex

https://youtu.be/vhfNQCiLWnI?si=XnIlsKNeziYl4dIm

- Introduction

- Consent
- Check gross visual acuity
- Check direct right reflex of both eyes- ask patient to fix on distant target and bring light from side and observe patient's pupil
- Check indirect light reflex - ask patient to fix on distant target and bring light from side of opposite eye
- Swinging flashlight test - light on one eye and bring to other eye from down, repeat 4 to 5 times - both pupils constrict

Hirshberg corneal reflection test

https://youtu.be/YKIUgG4-cOU?si=nJlfrxFYqQgLI9qm

- Introduction
- Consent
- Check gross visual acuity
- Patient fix on distant target and light Is shone on center from distance.
- Light will reflect from cornea and white spot seen

Ophthalmoscopy

https://youtu.be/SiuyE7w0lUc?si=mOqdX9_iue_1LIbz

Regurgitation test

https://youtu.be/3Y2_Xks2D78?si=jWUoR7rNmtuK_Se_

- Shine light on punctum
- Do Regurgitation on medial wall with little finger

Spherical vs cylindrical lens

https://youtu.be/Sy9R0fjdjr0?si=B6LgbCstEqO6NmJs

Ways to identify

- Feeling the lens (tactile identification)
- Looking for presence or absence of distortion
- Looking for movement of image through lens
- Looking for image size through lens

Tactile identification

- Convex lens is thicker at center and thinner at periphery
- Concave lens is thin at center and thick at periphery

- This method might not work for lower power of lens

Looking for distortion

- Make a cross and identify lens based on movement of image of the cross
- Spherical lens cause no distortion of cross
- Astigmatic lens (cylindrical lens) cause distortion of cross unless their axes coincide with the cross lines

Looking for movement of image

- when lens is moved from side to side and up and down along the arms of cross, the movement of cross is observed (seen in Spherical lens i.e. Convex and concave lens)
- Convex lens - against movement
- Concave lens - with movement
- Cylindrical lens - no movement along the axis of cylinder; movement is seen only across the meridian with power

Scissoring reflex - seen in cylindrical lens

Image size

- Magnification - convex lens
- Minification - concave lens