

Examination:

Examination / Clinical methods

1. History & General physical examination
2. Visual acuity
3. Torch examination
4. Ophthalmoscope examination
5. Slit lamp (Anterior & Posterior segments)
6. Tonometry
7. Pupil
8. Ocular movements
9. Confrontational Visual fields

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1- History & GPE

Nn

History is most important part of any examination.

Video OSPE 21

Examination: 1- History & GPE

You need to go through DD (Differential diagnosis sections. Following two sections will cover most patients coming to eye outpatients

- Decrease vision (see section 00)
- Red eye (see section 00)

2- Visual acuity: How to check

Video OSPE 22

Examination: 2- Visual acuity: How to check

- Cover one eye
- Check vision
- Record vision as
 - 6/6, 6/9, 6/12, 6/18, 6/26, 6/36, 6/60,
 - CF (counting finger)
 - HM (hand movement)
 - PL+ (projection of light)
 - NPL (no projection of light)
- Check other eye and record vision

2- Visual acuity: Pin hole

Video OSPE 23

Visual acuity: Pinhole



Figure 1

Pinhole: It is important part of refraction box. It is black lens with 2mm hole in center as in figure 1. It is also available as in figure 2.



Figure 2

Mechanism: Pinhole allows only central rays and blocks all peripheral rays.

Purpose: Improvement of vision with pinhole means that can be improved.

- 1- Vision improves **more with refraction than pinhole** means refractive error.
- 2- Vision improves **more with pinhole than refraction** mean corneal ectasia like keratoconus.

3- Torch examination

Video OSPE 24

Examination: 3- Torch examination

- Torch can be used in case of emergency to have general look at lids and anterior segment
- Torch can be used for check pupil reaction

4- Ophthalmoscopy

Video OSPE 25

Examination: 4- Ophthalmoscope

- Inform patient about examination that you will examine with bright light and your face will come close to patient face
- Instruct patient to look at distant object to relax accommodation
- Turn on from on/off button
- For patients **right** eye use your **right** eye, **right** hand and stand on **right** side of patient
- For patients **left** eye use your **left** eye, **left** hand and stand on **left** side of patient

5- Slit lamp

Video OSPE 26

Examination: 5- Slit lamp

- Turn on slit lamp from switch in table
- Adjust table height
- Adjust microscope eye pieces
- Patient sits with chin in chin rest and forehead against bar
- First examine with diffuse light
- Then make slit and examine
- Then use 90D/78D and examine posterior segment

Video OSPE 27

Examination: Slit lamp; What we see

- Lids
- Conjunctiva & sclera
- Cornea
- Anterior chamber & angle
- Iris
- Lens
- Vitreous
- Fundus (Disc+Retina+Vessels)



Examining Lid and anterior segment



Examining cornea and lens



Examining Fundus including disc

6- Tonometry

Video OSPE 28

Examination: 6- Tonometry

- Install topical anesthetic
- Apply fluorescein dye
- Touch cornea with prism
- Align semicircles
- Take reading



7- Pupil

Video OSPE 29

Examination: 7- Pupil

- Make sure room light is not bright
- Instruct patient to look at distance (if patient looks at you or other close object then pupils will constrict)
- Shine light in one eye and then other eye to check pupil reaction. This is direct pupil reaction
- Then shine light in one eye and check reaction in other eye. This is consensual light reflex

8- Ocular movements

Video OSPE 30

Examination: 8- Ocular movements

- Check vision in one eye at a time
- Check eye movements in all gazes
 - Right, left, up and down
 - Right up & right down
 - Left up & left down
- Cover test
- Cover uncover test

9- Confrontational fields

Video OSPE 31

Examination: 9- Confrontational fields

- Check vision in each eye by showing finger
- Sit at same level as patient
- **For patient right eye:** cover patient left eye and your right eye
- Bring moving fingers from four quadrants
- Then plot blind spot
- **For patient left eye:** cover patient right eye and your left eye
- Repeat procedure for quadrants and blind spot