



Ophthalmoscopy

Systematic direct fundoscopic examination of the red reflex, optic disc, retinal vessels, retina and macula.



Patient reference

Date

Time

Completed by

Equipment ready

- ☐ Direct ophthalmoscope with charged battery and working bulb
- ☐ Darkened room
- ☐ Short-acting mydriatic drop (e.g. tropicamide 1%), if dilation is appropriate
- ☐ Visual acuity chart and pinhole
- ☐ Alcohol wipe for cleaning the ophthalmoscope

Before · Preparation

- ☐ Take a focused history: onset, visual loss, pain, headache, flashes, floaters, trauma
- ☐ Record visual acuity in each eye before any drops
- ☐ Check pupils, including a relative afferent pupillary defect, before dilation
- ☐ Decide whether dilation is appropriate
- ☐ **Do not dilate the pupils if pupil reactions need to be monitored neurologically**
- ☐ If dilating, instil tropicamide 1% and wait about 15–20 minutes; document the drug and time
- ☐ Explain the examination, dim the lights and ask the patient to fixate on a distant point and keep looking at it
- ☐ Check the ophthalmoscope light and set the lens dial to zero

During · Approach and red reflex

- ☐ Use your right eye and right hand to examine the patient's right eye, and your left for the left
- ☐ From about arm's length, shine the light into the pupil and look for the red reflex
- ☐ Move slowly closer along a line about 15 degrees temporal to the patient's line of sight, keeping the red reflex in view
- ☐ Rest your free hand on the patient's forehead to steady yourself; do not touch the eye
- ☐ Adjust the lens dial to bring the retina into focus

During · Optic disc

- ☐ Find a retinal vessel and follow it towards the disc
- ☐ Assess disc colour
- ☐ Assess disc margins
- ☐ Estimate the cup-to-disc ratio
- ☐ Look for spontaneous venous pulsation at the disc

During · Vessels, retina and macula

- ☐ Follow the vessels out along the four main arcades
- ☐ Assess vessel calibre and crossings
- ☐ Examine each retinal quadrant for haemorrhages, exudates, cotton wool spots, microaneurysms and new vessels
- ☐ Look for signs of vascular occlusion
- ☐ Look for a grey elevated retina with folds suggesting detachment
- ☐ Examine the macula last by asking the patient to look briefly at the light
- ☐ Repeat the whole sequence on the other eye

After · Interpretation and action

- ☐ Summarise findings for each eye: red reflex, disc, cup, vessels, retina, macula
- ☐ **Suspected papilloedema with headache needs urgent neuroimaging and senior review**
EMOD-CP-45.
- ☐ **Sudden painless visual loss with suspected central retinal artery occlusion is a stroke equivalent: refer urgently to ophthalmology and follow the stroke pathway**
EMOD-CP-14.
- ☐ Refer suspected retinal detachment urgently to ophthalmology
- ☐ Tell the patient that dilated vision will be blurred for several hours and they must not drive until it has worn off
- ☐ Document visual acuity, whether the pupils were dilated (drug and time), and findings
- ☐ Clean the ophthalmoscope

