

MODULE

TITLE OF SKILL :FUNDOSCOPY

INTRODUCTION (RATIONALE):

Fundoscopy/ophthalmoscopy is an examination of the back part of the eye ball(fundus),which includes the posterior part of retina, optic disc and blood vessels with the help of an ophthalmoscope. Fundoscopy is a non invasive procedure helpful in evaluating common clinical symptoms like headache, visual defects, diabetes mellitus and hypertension.

LEARNING OBJECTIVES:

At the end of the session students should be able to:

- Identify the different parts of the ophthalmoscope.
- Demonstrate the correct method of fundoscopy.
- Recognize the normal structures of fundus.
- Identify at least six pathological changes in fundus.
 1. Papilloedema
 2. Optic disc atrophy
 3. Macular degeneration
 4. Diabetic retinopathy
 5. Hypertensive retinopathy
 6. Optic disc cupping

EQUIPMENT/MATERIAL NEEDED:

1. A fund scope with batteries.
2. An eye examination simulator with slides demonstrating different pathologies.

PROCEDURE

- Check the batteries and working condition of fund scope.

- Introduce yourself and explain the procedure to the patient and take informed consent.
- Have the patient face away from light.
- Make sure that both the examiner and the patient are in comfortable and correct position before starting the exam.
- Give the patient a specific object on the wall on which to fixate.
- Turn the ophthalmoscope on to the low-moderate light intensity.
- Place the hand that is not holding the ophthalmoscope either on the patient's head or shoulder to help you judge your distance.
- Hold the ophthalmoscope in your right hand and use your right to examine patient's right eye and vice versa.
- Using a large diameter aperture begin at arm's length and observe the red reflex of the retina.
- Follow the red reflex into the eye aiming at the left occipital pole when examining the right eye and vice versa.
- Bring the retina into focus by racking down the lens wheel until the blood vessels come into focus.
- Once a blood vessel on the fundus has been located then move along it in the direction of acute angles formed by the blood vessels and locate the optic disc. Observe three c's VIZ: color, contour and cup.
- After locating the disc retinal blood vessels should be examined in all four quadrant .I-e: supranasal, infranasal, and supratemporal, infra temporal. The veins are relatively large and dark red, whilst the arteries are relatively thin and pale. While examining the vessels observe the posterior surface of retina.
- Direct the beam temporarily to observe the macula.
- Repeat for the second eye.
- Thank the patient.
- **P.S:** most of the time chemical mydriasis is not required and adequate fundoscopy can be done. Only in those cases which require detailed examination of the peripheral retina, may 0.5 % Tropic amide (mydriacill) be used. Don't forget to ask patient regarding glaucoma and examine the anterior chamber of the eye and its angle to exclude glaucoma.