

How to use an Ophthalmoscope

Introduction

The ophthalmoscope seems a simple tool. But in reality, "fundi NAD" written in the doctor's notes often means "not actually discerned." The ophthalmoscope is not difficult to use but it requires some practice. Try to get in the habit of using it in every neurological examination—you'll soon get the hang of it.

How does it work?

There are different types of ophthalmoscope, and it always pays (with the lights still on) to familiarize yourself with the various dials and levers. When switched on, the emitted light should be:



Bright—turn it to maximum

White—ignore all other colors

Circular—again, ignore all the slits and crosses; turn the dial until you get a round circle.

Many people find it confusing to have to think about their own glasses and the patient's glasses. Don't worry about this—set all the numbers on the ophthalmoscope to "0." Ask the patient to remove his or her glasses—you can keep your own on or remove them as you prefer. Contact lenses do not need to be removed.

Get in the darkest part of the room. Close the blinds if there are windows nearby. Turn off the lights over your head if possible.

Where the patient should look

It is important to get your patient to fixate on a precise area (for example, the corner of the room or curtain rail). If you are too vague about this they will move their eyes. Instruct the patient to look at this spot no matter what—even if you get in the way. This spot should be located so that they are looking slightly away from you when they are examined—that is, to the left when you examine the right eye and vice versa.

Eye to eye

It is best to examine the patient's left eye with your own left eye and right eye with your own right eye—this takes practice. Try to keep your other eye open.

Begin at arm's length:

by shining the ophthalmoscope light into the patient's pupil (you will then see the red reflex).



Follow this reflex until your forehead rests on your thumb—you should immediately see the optic disc. It will probably be out of focus so, without moving your head, turn the lens dial either way—if the disc becomes clearer keep turning. If it becomes more blurred, turn the dial the other way.

To look at the macula, ask the patient to look directly into the ophthalmoscope light. The ophthalmoscope can also be used for examining the anterior part of the eye by turning the lens dial to +10.