

## **ROLE OF RETINOSCOPY IN REFRACTIVE ERRORS**

Retinoscopy is a subjective and objective method of instrument, it is determining and correcting refractive errors by the method of neutralization, it is also called skiascopy or shadow test.

### **PRINCIPLE:**

Retinoscopy is based on the fact that when light is reflected from a mirror into the eye, the direction in which the light will travel across the pupil will depend upon the refractive state of the eye.

### **PREREQUISITES FOR RETINOSCOPY**

1. A darkroom,
2. A trail box
3. A trail frame
4. Vision box
5. Retinoscopy

### **TYPES OF RETINOSCOPY**

- A. mirror retinoscopy
- B. Self-illuminated retinoscopes

#### **A MIRROR RETINOSCOPY**

##### **1 .Plane mirror** retinoscopy

##### **2 . Pristley-Smith mirror (concave mirrors)**

#### **B SELF-ILLUMINATED RETINOSCOPES**

1. Spot retinoscopy
2. streak retinoscopy

These are more popular and costly.

### **PROCEDURE**

The patient is made to sit at a distance of 1 M from the examiner. With the help of a retinoscope, light is thrown onto the patient's eye, who is instructed to look at a far point (to relax the accommodation). However, when a cycloplegic has been used, the patient can look directly into the light and have the refraction assessed along the actual visual axis. Through a hole in the retinoscope's mirror, the examiner observes a red reflex in the pupillary area of the

patient. Then the retinoscope is moved in horizontal and vertical meridia keeping a watch on the red reflex (which also moves when the retinoscopy is moved.)

In low degrees of refractive errors the shadow (red reflex) seen in the papillary area is faint and moves rapidly with the movement of the mirror while in high degrees of ametropia it is very dark and moves slowly. In the presence of astigmatism when the axis does not correspond with the movement of the mirror, the shadow appears to swirl around.