NAME: IKEMEFUNA DUMEBI MATRIC NUMBER: 18/MHS02/092 LEVEL: 200LVL DEPARTMENT: NURSING SCIENCE COURSE: PHS 212 (PHYSIOLOGY)

QUESTION

Write short notes on any two eye defects

ANSWERS

1. MYOPIA OR SHORT SIGHTEDNESS

Myopia is a condition that deals in an error of refraction. It is the eye defect characterized by the inability to see the distant object. It is otherwise called short sightedness because the person can see near objects clearly but not the distant objects. In emmetropia, the far point is infinite. In myopia, the near vision is normal but the far point is not infinite, i.e. it is at a definite distance. In extreme conditions, it may be only a few centimeter away from the eye (myo = half closed; ops = eye). Nearsightedness (myopia) is a common vision condition in which you can see objects near to you clearly, but objects farther away are blurry. It occurs when the shape of your eye causes light rays to bend (refract) incorrectly, focusing images in front of your retina instead of on your retina.

Nearsightedness may develop gradually or rapidly, often worsening during childhood and adolescence. Nearsightedness tends to run in families.

<u>Cause</u>

In myopia, the refractive power of lens is usually normal. But, the anteroposterior diameter of the eyeball is abnormally long. Therefore, the image is brought to focus a little in front of retina. Light rays, after coming to a focus, disperse again so, a blurred image is formed upon retina.

Correction

In myopic eye, in order to form a clear image on the retina, the light rays entering the eye must be divergent and not parallel. Thus, the myopic eye is corrected by using a biconcave lens. Light rays are diverged by the concave lens before entering the eye.



NORMAL VISION AND MYOPIA



NORMAL VISION FARAWAY OBJECT IS CLEAR

MYOPIA NEARSIGHTED EYE THE EYEBALL IS TOO LONG FARAWAY OBJECT IS BLURRY

MYOPIA CORRECTED CORRECTION WITH A MINUS LENS

2. HORNER SYNDROME

Horner syndrome is a combination of signs and symptoms caused by the disruption of a nerve pathway from the brain to the face and eye on one side of the body. Typically, Horner syndrome results in a decreased pupil size, a drooping eyelid and decreased sweating on the affected side of your face. Horner syndrome is the result of another medical problem, such as a stroke, tumor or spinal cord injury. In some cases, no underlying cause can be found. There's no specific treatment for Horner syndrome, but treatment for the underlying cause may restore normal nerve function. Horner syndrome is also known as Horner-Bernard syndrome or oculosympathetic palsy Horner syndrome is an eye disorder caused by damage to cervical sympathetic nerve. Symptoms of Horner syndrome appear on the affected side.

The symptoms are:

- 1. Ptosis (drooping of upper eyelid)
- 2. Swelling of lower eyelid
- 3. Miosis (abnormal constriction of pupil)
- 4. Enophthalmos (sinking of eyeball into its cavity)
- 5. Absence of sweating on affected side of the face.



Horner's Syndrome