

NAME: FASIPE OLUBUNMI
MATRIC NO: 18/MHS02/084
DEPARTMENT: NURSING SCIENCE
COURSE: PHYSIOLOGY
COURSE CODE: PHS 212

QUESTIONS

WRITE SHORT NOTES ON ANY TWO EYE DEFECTS

1. Hyperopia: (farsightedness)

This is a defect of vision in which there is difficulty with near vision but far objects can be seen easily. The image is focused behind the retina rather than upon it. This occurs when the eyeball is too short or the refractive power of the lens is too weak.

Hyperopia Causes

Your eyes focus on light rays and send the image of what you're looking at to your brain. When you're farsighted, the light rays don't focus the way they should.

The cornea, the clear outer layer of your eye, and the lens focus images directly on the surface of your retina, which lines the back of your eye. If your eye is too short, or the power to focus is too weak, the image will go to the wrong place, behind your retina. That's what makes things look blurry.

Hyperopia Symptoms

You may have:

- Trouble focusing on nearby objects
- Headaches
- Blurry vision
- Eye strain
- Fatigue or headache after you do a close-up task such as reading

Hyperopia Treatment

Hyperopia can be corrected by wearing glasses/contacts that contain convex lenses.

2. Astigmatism:

This defect is when the light rays do not all come to a single focal point on the retina, instead some focus on the retina and some focus in front of or behind it. This is usually caused by a non-uniform curvature of the cornea. A typical symptom of astigmatism is if you are looking at a pattern of lines placed at various angles and the lines running in one direction appear sharp whilst those in other directions appear blurred.

It's common to have astigmatism along with nearsightedness (myopia) or farsightedness (hyperopia). These three conditions are called refractive errors because they involve how your eyes bend (refract) light.

Astigmatism Symptoms

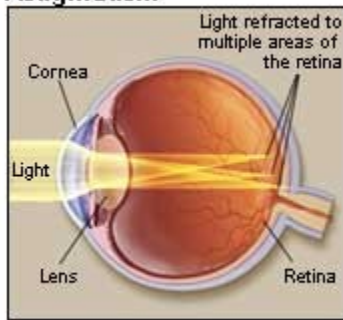
Symptoms of astigmatism may include:

- Blurry or distorted vision
- Eyestrain
- Headaches
- Trouble seeing at night

Astigmatism Causes

Most people are born with it, but experts don't know why. You can also get it after an eye injury, an eye disease, or surgery.

Astigmatism



Rarely, a condition called keratoconus can cause astigmatism by making the clear front part of your eye (your cornea) thinner and more cone-shaped. You'll probably need contacts (but not glasses) to see clearly.

You can't get astigmatism from reading in low light or sitting too close to the TV.

Astigmatism Diagnosis

Astigmatism symptoms come on slowly. Go to an eye doctor if you notice changes in your vision. You'll need a complete eye exam. Your doctor will test the sharpness of your eyesight by asking you to read an eye chart. They'll also use tools to measure your vision, including:

- **Phoropter.** You look through a series of lenses to find the ones that give you the clearest vision.
- **Keratometer/topographer.** This machine uses a circle of light to measure the curve of your cornea.
- **Autorefractor.** This device shines light into your eye and measures how it changes as it bounces off the back. This gives your doctor an idea of which lenses you need.

There are two treatments for the common levels of astigmatism:

Corrective lenses. That means glasses or contacts. If you have astigmatism, your doctor will probably prescribe a special type of soft contact lenses called toric lenses. They can bend light more in one direction than the other. If your case is more severe, you might get gas-permeable rigid contact lenses for a procedure called orthokeratology. You wear the lenses while you sleep, and they reshape your cornea. You'll need to keep wearing the

lenses to hold this new shape, but you won't have to wear them as often.

Refractive surgery. Laser surgery also changes the shape of your cornea. Types of refractive surgery include LASIK and PRK. You'll need to have otherwise healthy eyes with no retina problems or corneal scars.

Irregular astigmatism is far less common and is linked to problems with your cornea, the front part of the eye. Keratoconus is one example.