

- Shortsightedness:

Shortsightedness or myopia is the condition in which distant object appears blurred while close objects can be seen clearly.

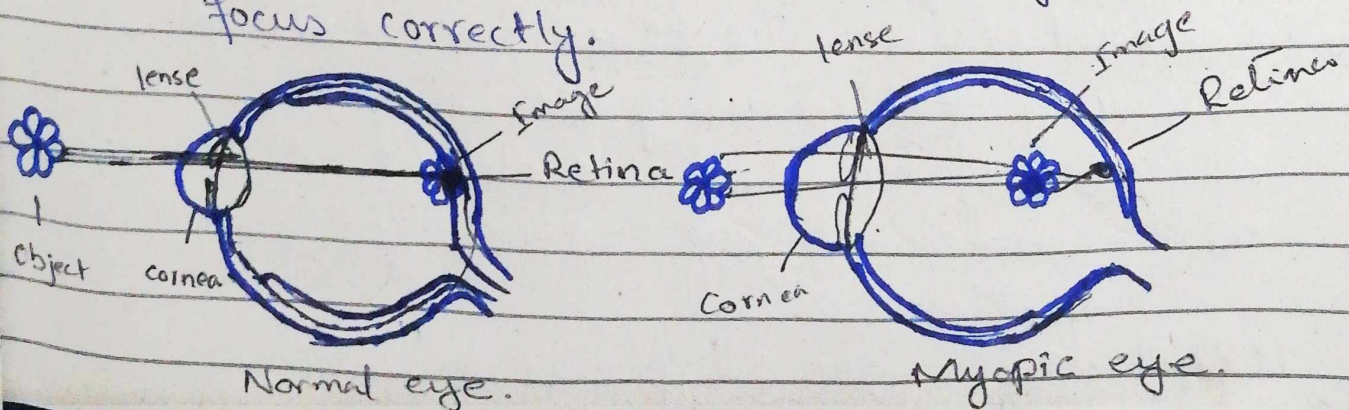
• Symptoms:

1. Impaired distance vision is most common symptom in myopic individuals.
2. Individuals with myopia/shortsightedness squint to see objects more accurately.
3. Eye strain, when doing tasks related to focus on faraway objects.
4. Headaches are also frequently observed in myopic individuals.

• Causes:

Shortsightedness or myopia is caused by refractive error. When eye is unable to focus light correctly. When the light is focused in front of retina instead on it.

It happens when the shape of eye is not normal i.e eyeball is long or cornea is too rounded, which makes it difficult to focus correctly.



Treatment :

Myopia can be treated through following methods.

1. Corrective lenses :

- Eyeglasses can be designed to correct refractive errors. In case of myopia concave lens is used.
- contact lenses is another common method of correcting myopia. It helps in refocusing light rays on retina.

2. Corrective Eye Surgery:

As glasses or contact lenses are temporary solution of myopia, it can be treated permanently through various corrective eye surgery.

Farsightedness/Hyperopia

Farsightedness is a refractive error, in which eye does not refract light properly resulting in blurred vision of near objects.

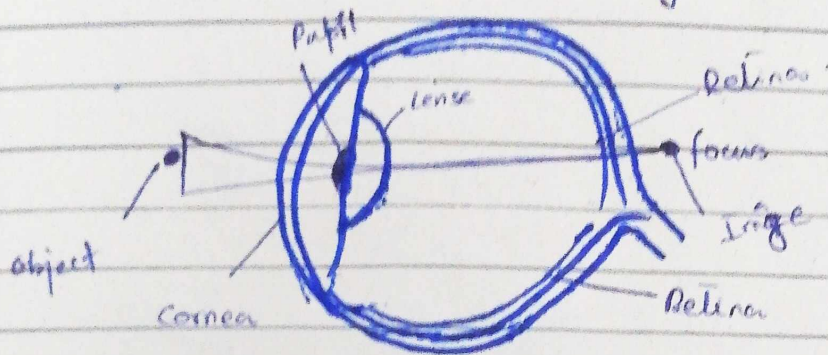
Symptoms

Symptom of farsightedness includes:

- difficulty with close tasks like reading, sewing etc, writing etc.
- Frequent squint to see clearly.
- Eye strain including burning eyes and aching.
- Headache after doing close tasks.

Causes:

A flat cornea and eyeball shorter than normal cause light to focus beyond the retina instead of on it, due to which the individual with farsightedness is unable to see near objects clearly.



Hyperopia / Farsightedness.

Treatment:

Farsightedness can be treated through.

- Corrective lenses, in case of farsightedness convex lens can be used, in glasses. contact lens can also be used.
- For permanent recovery surgical techniques can also be used.

Color Blindness:

Color blindness refers to inability to see difference between certain colors.

Most people with color blindness cannot distinguish between shades of red and green. Some may not differentiate between shades of blue and yellow, but this is less common. However a complete color

complete color blindness in which everything is seen in shades of black and white is very rare condition.

Symptoms:

Difficulty and problem in differentiating colors in any task related to colors or differentiating the colors in traffic light.

~~Treatment~~: Causes:

There are three types of cone cells, each is sensitive to different light wave-lengths. For example

1- one type is sensitive to blue light

2- Another perceives green light

3- and third perceive red light

Color blindness occurs when one or more of the cone cell have some abnormality. For example if the red cone is faulty the individual will not be able to see color containing red.

Treatment:

There are no specific treatment for color blindness, however colored contact lens may help perception of contrast between confusing colors, but it is temporary technique and applicable only on certain colors.

Night blindness

Night blindness is a condition in which the individual is unable to see well in night or in poor light.

Symptoms

The most common symptoms are

1. Blurry vision in low light.
2. Seeing glare around lights.
3. Total loss of vision when entered into a dark room.
4. Difficulty seeing distant object in low light.
5. Problem in driving during night.

Causes:

Rod cells which provide black and white vision are involved in night vision. When rods stop working due to any injury or disease decreased night vision or complete color blindness can occur.

Vitamin A deficiency is also another important factor in night blindness.

Treatment:

Depending on the reason of night blindness different treatment can be followed i.e

- If night blindness is caused by cataracts cataract surgery will be done which involves replacing eyes defective lens with clearer one.

- If color night blindness is due to vitamin A deficiency then vitamin A supplement can be helpful.

