**EYE DEFECTS**

HYPERMETROPIA is a condition of the eye in which light is focused behind, instead of on, the retina. This results in close objects appearing blurry, while far objects may appear normal. As the condition worsens, objects at all distances may be blurry. Other symptoms may include headaches and eye strain. People may also experience accommodative dysfunction, binocular dysfunction, amblyopia, and strabismus.

In a hyperopic eye, the light is not bent sufficiently so that it focuses at a point behind the retina. Here a person sees well for distance but near vision is difficult and causes strain. Hence hyperopic people are called long-sighted. Eyesight problems, such as hypermetropia, are also known as refractive errors. Long sight leads to problems with near vision and the eyes may commonly become tired. Distance vision (long sight) is, in the beginning, good.

Hypermetropia may result from anatomical and genetic factors.

The structural causes of the disease are as follows-A weakness of the ciliary muscles; Low converging power of eye lens; Abnormal shape of the cornea; Defective blood vessels in the retina; Certain pre-existing diseases can also precipitate Hypermetropia.

Long sight can be corrected by glasses or contact lenses, or sometimes 'cured' with laser eye surgery.

ASTIGMATISM is a common vision problem caused by an error in the shape of the cornea. With astigmatism, the lens of the eye or the cornea, which is the front surface of the eye, has an irregular curve. This can change the way light passes, or refracts, to the retina. This causes blurry, fuzzy, or distorted vision.

The two main types of astigmatism are corneal and lenticular.

- A corneal astigmatism happens when the cornea is misshapen.

- A lenticular astigmatism happens when the lens is misshapen.

The symptoms of astigmatism include:

-blurry, distorted, or fuzzy vision at all distances (up close and far away)

-difficulty seeing at night

-eyestrain

Astigmatism, like near-sightedness and farsightedness, usually can be corrected with eyeglasses, contact lenses or refractive surgery.

The axis of astigmatism in eyeglass and contact lens prescriptions describes the location of the flatter principal meridian of the eye using the above 180-degree rotary scale.