



Astigmatism's Impact on the Cornea of the Eye

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DESCRIPTION

A flaw in the shape of the cornea results in astigmatism, a common eyesight issue. The cornea, which is the front surface of the eye, has an uneven curve when a person has astigmatism. This could alter the way light enters or refracts at retina of eye, which would result in hazy, distorted, or blurry vision. Two other issues with how light enters into retina are near sightedness and farsightedness. Hyperopia or being farsighted it is known as myopia to be near sighted. Astigmatism, including types, who is at risk for it, how to detect it, and how to treat it. Lenticular and corneal astigmatism are the two basic forms. When the cornea is damaged or distorted, astigmatism develops on the cornea. When the lens is distorted, lenticular astigmatism develops. Regular or irregular astigmatism are other terms used to characterise astigmatism. If the eye is not totally curved, then there is a normal astigmatism. Consequently, it can assume the shape of a football rather than being circular like a basketball. Vision becomes distorted and generally fuzzy as a result. When the eye isn't perfectly round, an uncommon irregular astigmatism might also happen. However, an irregular astigmatism has an uneven curvature, in contrast to a regular astigmatism, which causes an even misshaping of the eye. As a result of this flaw, eyesight is also blurry and distorted. Although the exact cause of astigmatism is unknown, heredity plays a significant role. It frequently exists at birth but can also appear later in adulthood. It might also happen following eye surgery or as a result of an eye injury. Together with near sightedness or farsightedness, astigmatism frequently arises. However, keratoconus, an uncommon disorder, can occasionally be the cause of astigmatism. Because of this eye disorder, the cornea

suffers damage, thinning and protruding. This causes sensitive eyes to bright lights and foggy or fuzzy vision. Keratoconus also has an unknown aetiology but is thought to be inherited. Remember that reading in low or dim light does not impair vision or induce astigmatism, but it can make it harder for the eyes to focus. If a person read in low light and already have astigmatism in one eye, that person can experience additional blurriness. The signs of astigmatism develop gradually. If a person notice changes in their vision, visit an eye doctor. Doctor will ask that person to read an eye chart to determine how keen person's vision is. They will also employ the following equipment to assess the patient's vision:

- Keratometer: cornea's central bend is measured using this device. It locates the flattest and steepest bends doctor can learn about cornea's shape and focusing capacity from the measurements.
- Auto refractor: This apparatus flashes light into patient's eye and detects how it changes as it reflects off the back. This helps ophthalmologist determine which lenses that person require.
- Corneal topographer: The most thorough information on the shape of cornea is provided by this technique. Patients are instructed to look at a particular location by the doctor. Thousands of minute measurements are being gathered by the device in the meantime. Using the information, a computer creates a colour map of patient's cornea. If doctor decides to do astigmatism or cataract surgery, they will consult it. They might utilise it to put in contacts. Additionally, it can aid in the keratoconus diagnosis.

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