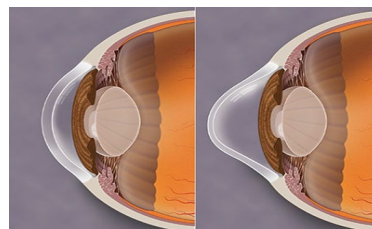


Keratoconus

Keratoconus occurs when the normally round cornea (the front part of the eye) becomes thin and irregular (cone) shaped. This abnormal shape prevents the light entering the eye from being focused correctly on the retina and causes **distortion of vision** and **sensitivity to glare**.



Symptoms usually appear in the late teens or early 20s. Keratoconus may progress for 10-20 years and then slow in its progression. Each eye may be affected differently. As keratoconus progresses, the cornea bulges more and vision may become more distorted.

Keratoconus usually takes years to go from early- to late-stage. For some people, though, keratoconus can get worse quickly. The cornea can swell suddenly and start to scar. When the cornea has scar tissue, it loses its smoothness and becomes less clear. As a result, vision grows even more distorted and blurry.

Doctors do not know for sure why people have keratoconus. About 1 out of 10 people with keratoconus have a parent who has it too. Keratoconus is also associated with **eye allergies** and **excessive eye rubbing**.

Keratoconus can be diagnosed through a comprehensive eye exam. Your eye doctor will examine your cornea, and may also map your cornea's surface using a special computer (**topographer**). This detailed image shows the condition of the cornea's surface.

Eyeglasses or **soft contact lenses** may be used to improve vision in the early stages of keratoconus. As the disorder progresses, **rigid gas permeable contact lenses** (which rest on the cornea) or **scleral lenses** (which vault the cornea and rest on the white of the eye) can be prescribed to correct vision.

Surgical treatments:

- **Intacs.** This is a small curved device that your ophthalmologist surgically puts in your cornea. Intacs help flatten the curvature of your cornea to improve vision.
- **Collagen cross-linking.** Your ophthalmologist uses a special UV light and eye drops to strengthen the cornea. Doing this helps to flatten or stiffen your cornea, keeping it from bulging further. This may limit future progression.
- **Corneal transplant.** When symptoms are severe, your ophthalmologist may suggest a corneal transplant. Your ophthalmologist replaces all or part of your diseased cornea with healthy donor cornea tissue.

Note: **Pellucid Marginal Degeneration (PMD)** is a related condition which typically has a later onset.

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