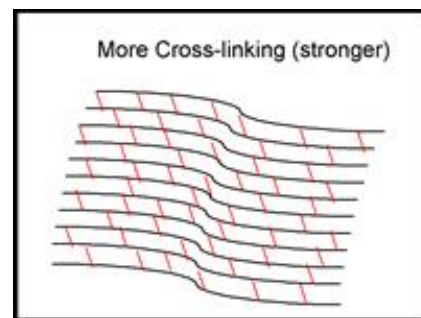
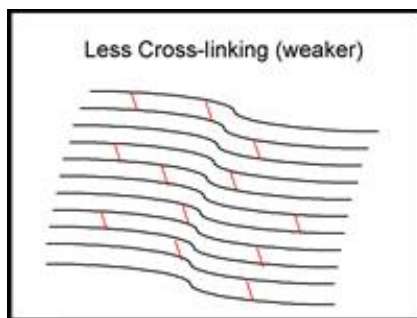
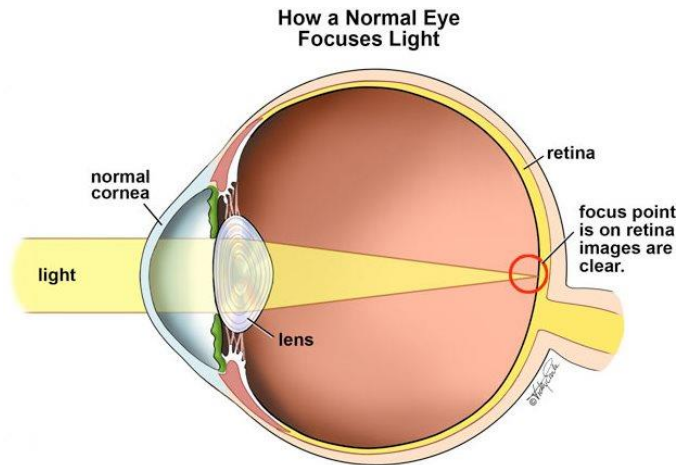


Corneal crosslinking information

Corneal crosslinking is a procedure used to stabilise keratoconus. Keratoconus is a disease in which the clear window at the front of the eye, the cornea, thins and bulges. It occurs in 1 in 2000 people. The cornea does most of the focusing of the eye so this can have a major effect on vision. The exact causes are unknown, but it is more common in people who rub their eyes a lot. It is usually present in both eyes but commonly worse in one eye. In its mildest form it may not cause any noticeable change in vision. In its severest form keratoconus can cause blindness that can only be treated by corneal transplantation.

Although the cornea looks transparent it is made up of fibres. These fibres are 'crosslinked' to each other which keeps the cornea strong and able to maintain its shape. In keratoconus, the connection between the fibres is weakened. The crosslinking procedure increases the crosslinks between the fibres, which stiffens and prevents further bulging of the cornea.



The crosslinking procedure is fairly non-invasive and done with vitamin drops and light. You will be lying down for the procedure. Drops are put in to numb the eye. The surface 'skin' is removed from the cornea. The cornea is soaked in vitamin B2. A UV light is then shone on the eye to complete the crosslinking. A contact lens is placed on the eye as a bandage while the 'skin' reforms. The whole procedure will be over within half an hour. Sometimes crosslinking is combined with laser corneal regularisation (PTK) to improve vision. This just adds a few minutes at the start of the procedure.

The eye may be a little scratchy and uncomfortable for a couple of days after the procedure as the 'skin' is growing back. Vision will be blurry during this time. The contact lens is removed after about 5 days. Antibacterial and anti-inflammatory drops will need to be put in the eye for 4 weeks after the procedure. Contact lenses can be used again after this time if used previously.

Crosslinking is successful in stopping progression of keratoconus in over 95% of patients (some patients may also notice an improvement in vision). The chance of success will be greater if you make every effort not to rub your eyes in the future. If your keratoconus does progress after crosslinking it can be repeated. The risk of significant scarring or infection after crosslinking is less than 1%.

Crosslinking was first used in Australia in 2006. It is widely used around the world as the treatment of choice for halting progression of keratoconus. Due to it being a fairly new procedure no one knows how long it will last. From studies done to date most doctors expect the effect to be permanent.