St. Teresa's Hospital Eye Centre <u>Patient Information</u> <u>Corneal Collagen Crosslinking with Riboflavin (CXL)</u>

Keratoconus

Keratoconus is a disease of the cornea which causes the cornea to become weak and it may gradually bulge outwards and become thin. In its earliest stages, keratoconus can be difficult to detect. Symptoms may include nearsightedness, sensitivity to light, astigmatism and blurred eyesight. As keratoconus progresses, the cornea becomes more distorted and symptoms may become more apparent.



Normal cornea

keratoconic cornea

Corneal Collagen Crosslinking

Corneal Collagen Crosslinking with Riboflavin (CXL) is a new procedure that has been shown to strengthen the weak corneal structure. The cornea is made up of many layers of collagen. These layers are arranged in a very regular pattern with cross links for strength. CXL works by increasing the amount of collagen cross-linking. The cornea is therefore strengthened. Patients' cornea thickness must be more than 400 μ m to undergo the operation.





The CXL treatment lasts only just 50 minutes. During the treatment, riboflavin eye drops are applied to the cornea, which is then activated by ultraviolet light.

Ultraviolet A light is used in this procedure. The intensity of the ultraviolet light used in this treatment is not harmful to the eye. The development of this new technique is a big step in the management of keratoconus. This is a simple once-only treatment that will greatly alter the outcome of the disease.

References: VisioMed retrieve from http://www.visionmed.co.za/corneal-procs-keratoconus.php