Corneal keratoconus

This is a condition that develops after Puberty but may not present in mild cases to the late twenties or thirties. It is a condition where the cornea or window of the eye thins changing its shape. The cornea is the main refractive lens of the eye so even minor changes in its shape alter the way light enters the eye and it is like having the wrong glasses on.

Who is affected
Only very rarely does it run in families and males and females are equally affected. However those who suffer from allergies or an atopic individual are more prone to this condition. In addition people who rub their eyes a lot a more commonly affected. It is also more common in genetic conditions such as Down’s Syndrome, Turners Syndrome etc..

How is it detected
Usually it is the Optometrist at the Opticians that spots this condition and refers you to the specialist for further opinion.

The picture on the left shows the distortion of the Corneal keratoconus and the picture on the right is of a normal eye.

How is it Treated
Most people can be treated with glasses or contact lenses. Less than 20% of people end up needing further treatment.
1. Glasses In the early phases this is possible to correct with glasses.

2. Contact lenses of the Gas Permeable Contact Lenses variety change the distorted cornea to a spherical smooth cornea and are the mainstay of treatment. Often your own optometrist can do this for you but in more complicated cases a specialist contact lens practitioner may be helpful. This is organized through your specialist consultant. Newer lenses like Kerato soft lens and Double or saturn lenses can keep patients in contact lenses for longer. Proper cleaning with Mira flow and or Boston lens clearer helps keep deposits down which can be a problem. Also consider using de proteinising solutions that are used for soft lenses and if infections are a problem using the two step 10-10 sterilising solutions can help.

3. If you prefer or your Optometrist has any difficulty fitting the lenses then the Corneal contact lens specialist Dr Ursula Vogt at The Western Eye Hospital is happy to see you. As she is a specialist your insurance company usually will pay for the consultations.
   Her contact details are 143 Harley Street London W1H 1AA Tel: 020 7935 0886
   Alternatively Mr. Sam Silver 37 Kensington Church Street London W8 4LL 020 7937 8282 specialises in contact lenses as well plus fits scleral lenses which is especially suitable for those who have had problems with rigid lenses.

4. Cross linking is a new technique where a solution is applied to the cornea that then strengthens the cornea to prevent further deterioration.

5. Intacs are plastic rings inserted into the cornea to give added rigidity and improve the shape of the cornea.

6. If the cornea is markedly distorted then Corneal Graft is the ultimate option. In more advanced, and relatively rarely, the cornea is so distorted that contact lenses cannot help and then the cornea needs replacing with a corneal graft. This is a very successful operation and virtually always will restore the vision. This is organized through your specialist.

7. You are however NOT suitable for refractive or Laser eye surgery.

Please be reassured that this is a common condition but with the correct treatment is not a condition that is associated with loss of vision. Should you have any further questions please do not hesitate to ask your Doctor. Nicholas Lee 2009