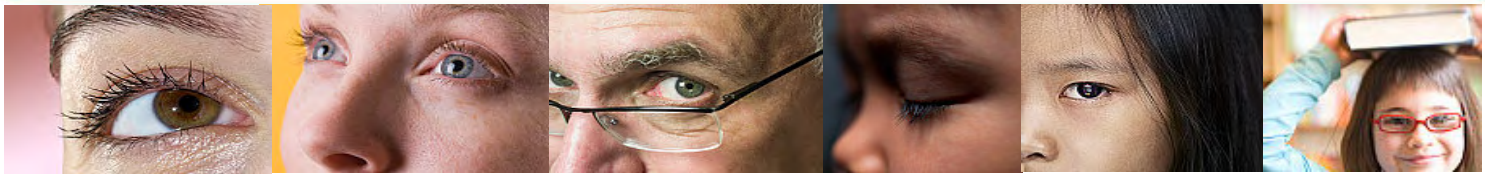
Laser Eye Surgery
in conjunction with World Sight Day 2008



The surgery is intended to reduce a person's dependency on glasses or contact lenses.

Doctors use a laser to permanently change the shape of the cornea, the clear covering over the colored iris, and the lens, which is just behind the pupil of the eye.

What does the surgery entail?

- The surgery is done as an out-patient procedure and takes about an hour.
- Local anesthetic drops are placed in the eye being treated.
- A knife is used to cut a flap in the cornea.
- A hinge is left at one end of this flap.
- The flap is folded back to reveal the middle part of the cornea. Pulses from a laser vaporize a portion of this and the flap is replaced.
- An eye patch is usually worn over the treated eye for 24 hours.

How does this improve vision?

People need to wear glasses for different reasons. Some people are said to be short-sighted or myopic. This is due to the cornea being too steeply curved or the eye longer than normal. Therefore, light rays fall in short of the retina - the area at the back of the eye that interprets the image - and results in blurred distance vision. Other people are long-sighted or hyperopic because their cornea is too flat or the eye is too short. This means that the light rays focus too far beyond the retina. Others have a condition where the cornea is oval shaped rather than spherical, called astigmatism. This produces two different focal points which can blur images at all distances. Laser surgery to reshape the cornea can help to correct these problems.

Will it help with age-related vision loss? No. Laser surgery will not be able to cure age-related presbyopia and the need for reading glasses that people often develop in their mid-40's. This is because presbyopia is not to do with a problem with the cornea. Instead, it occurs when the lens becoming less flexible with age.

What are the risks?

Complications occur in less than 5% of cases, according to the Royal College of Ophthalmologists. Some people have a problem with dry eyes in the months after surgery and artificial tear supplements might be needed in the long term.

http://news.bbc.co.uk/1/hi/health/medical_notes/4649079.stm