

## Retinal tear

Tears are uncommon, but if one develops, laser treatment around it, or freezing therapy, may be necessary to prevent the tear becoming larger.

The retina is the delicate transparent tissue covering the interior wall of the eye. Light-sensitive retinal fibres receive images projected through the lens and send them through the optic nerve to the brain which converts the information into an image. When the retina is damaged, the images sent to the brain are blurred.

Retinal detachment occurs in one in 10,000 people per year. The condition is most typically found in patients who are short sight, or who have undergone previous eye surgery, experienced eye trauma, or who have a family history of retinal detachments. Middle-aged and older individuals are at higher risk than the younger population. The condition is also likely to recur in individuals with a previous retinal detachment.

Retinal detachment typically begins with one or more small holes or tears in the retina. These holes are caused by shrinkage of the vitreous--a clear, gel-like body which fills the centre of the eye and is attached to the retina. Once a tear has occurred, watery fluid may flow through the tear from the centre of the eye causing the retina to detach. When the retina detaches, you will experience the sensation of a veil or curtain coming across your vision. Eventually, central vision is also lost.

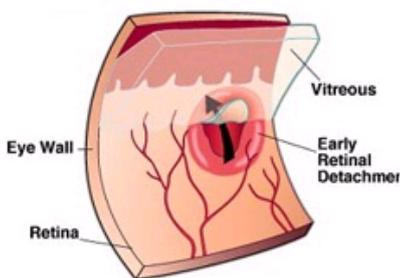


Figure 2: Early Detachment

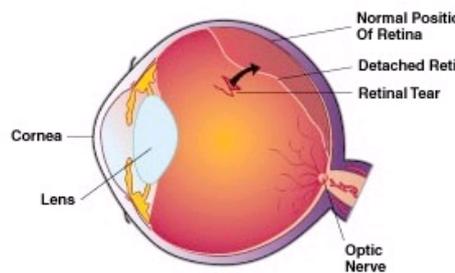


Figure 3: Retinal Detachment



## Treatment C8200

Laser treatment is done either in the Out Patient Department or occasionally in theatre depending on how far out the retinal tear is. The modern Pascal computer controlled laser has special pattern to encircle the hole with a double row in a precise fashion. If the tear is very peripheral then Indirect Laser in main theatre at The Western Eye Hospital is needed, however if not too far out, laser in the Out Patient Department can be done.

This is not painful, just a little uncomfortable and seals or welds the retina together to prevent a retinal detachment occurring in the future. It is 95% successful in this.

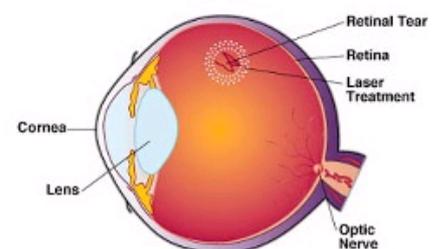


Figure 4: Laser Repair

However if the tear is very peripheral or the laser has failed then using a freezing technique, called Cryotherapy is done. This is a cold probe applied to the outer part of the eye to freeze the hole enabling tissue glue to form and seal the hole. This is done in main theatre by the vitreo-retinal surgeon team at The Western Eye Hospital. It is done under Local Anaesthesia and is just mildly uncomfortable. It is a day case procedure.

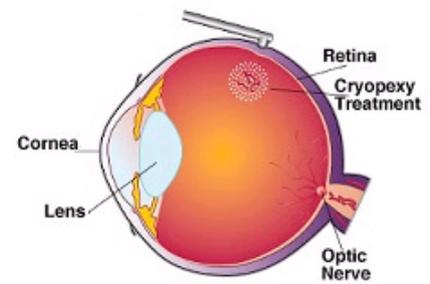


Figure 5: Cryopexy

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