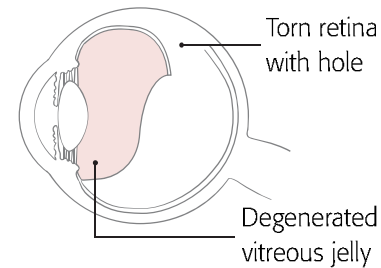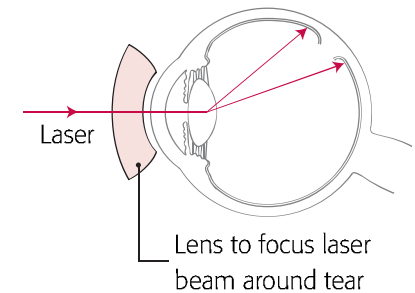# Retinal detachment surgery

- Vitreous jelly in the eye cavity can pull away from the retina as you get older. Usually this does not cause problems. If the jelly does not separate from the retina it can pull and tear it, causing sudden flashing lights and floaters (spots, circles or threads) in your vision. If this happens, contact your eye specialist *immediately*. Laser treatment in the out-patient department can seal the tear.

- If the tear is left untreated, fluid can leak through the tear and the retina will detach. This causes a dark shadow in your vision. You will need an operation to prevent loss of vision in that eye. There are a number of ways to seal the tear in a detached retina.

- The detachment is usually repaired by removing the jelly from the main eye cavity with an operation called a vitrectomy. Instruments are placed through three very small holes in the white of the eye. The jelly is cut into very small pieces then sucked out of the eye through a fine tube. As the jelly is removed, a special salt solution is passed into the eye through one of the small holes to keep the eye's shape and pressure. The surgeon views the inside of the eye, lit by a fibre-optic light, through a microscope. Once the jelly has been removed a gas bubble is placed into the eye cavity to push the retina back in position and the tear is then sealed by laser.

- The gas bubble will temporarily make your vision very blurred but it will improve slowly as the gas disappears into the bloodstream. You may have to lie in a particular position so that the bubble pushes up against the tear to help seal it. You must not fly with the gas bubble in the eye.

- Less often, the tear in the retina is sealed from the outside by stitching a piece of plastic (buckle) over the tear. The plastic is covered by the conjunctiva (the skin that covers the white of the eye). In complicated retinal detachments in which scar tissue has formed, clear oil is sometimes put into the eye cavity to push the retina back in place.
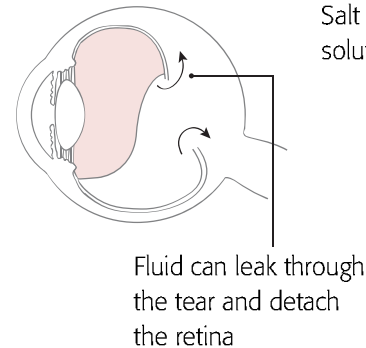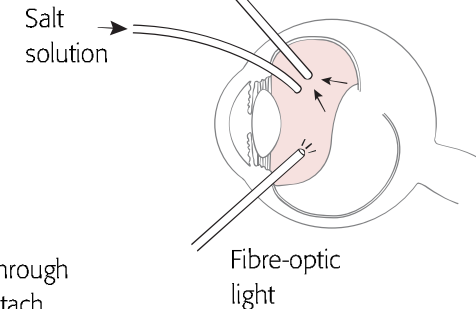
Flashes and floaters

Torn retina with hole

Degenerated vitreous jelly

Laser treatment

Laser

Lens to focus laser beam around tear

Dark shadow

Fluid can leak through the tear and detach the retina

Vitrectomy

Jelly

Salt solution

Fibre-optic light

After the operation

Posturing

Inserting a buckle and oil

Plastic buckle

Tear

Gas or oil seals the tear from the inside