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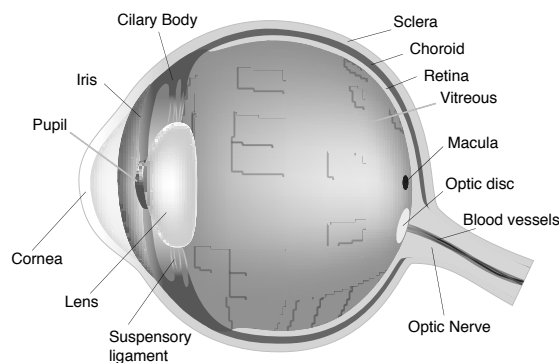
Consultant Ophthalmic and Retinal Surgeon

Patient Information: Retinal Tears and Holes

What is a retinal tear?

The retina is the lining inside the back of the eye – it functions a bit like the film in a camera, absorbing light to create an image of the outside world.

If the clear gel that fills the eye (the vitreous) pulls away from the retina this is called a Posterior Vitreous Detachment. Sometimes this can pull a break or tear in the retina.



What is a retinal hole?

Retinal holes are round defects in the retina that occur naturally, often without detachment of the vitreous. They are sometimes associated with short-sightedness (myopia).

What are the symptoms of retinal holes and tears?

Quite often retinal holes and tears do not cause any symptoms. However, if there is a posterior vitreous detachment then there may be floaters in the vision and flashing lights. The floaters and flashes usually resolve with time.

What treatment do I need?

Retinal tears usually require treatment with laser (laser retinopexy) or a freezing probe (cryotherapy) to reduce the risk of the retina detaching from the back of the eye (retinal detachment). Retinopexy and cryotherapy aim to create a small scar that sticks down the retina to the layer of cells underneath. This prevents the fluid inside

the cavity of the eye passing through the tear to create a retinal detachment. It is often described as 'spot welding'.

Longstanding tears sometimes lead to a healing response that creates an adhesion that produces much the same effect as retinopexy/cryotherapy - in this scenario treatment may not be required.

Whilst round holes can also lead to retinal detachment it is not proven that retinopexy reduces this risk. In the past they were usually treated, but nowadays only high-risk retinal holes are usually treated.

What are the risks of laser retinopexy and cryotherapy?

Laser retinopexy and cryotherapy are very safe procedures but they can, very occasionally, damage vision. There is also a risk of a minor abrasion to the eye, but although uncomfortable, this will usually settle over a day or two. Your eye may be a bit red and tender after cryotherapy, for a few days. It is possible that retinopexy/cryotherapy may be associated with epiretinal membrane, a fine membrane that can grow on the retina, however, this association may be due to the retinal tear/hole rather than treatment.

About two weeks after treatment you will need further review, to check if the laser or cryotherapy has produced the desired reaction. If not, they may need to be 'topped-up' with further treatment. Often cryotherapy is used to top-up laser treatment, as cryotherapy can reach some of the areas that are hard to get to with laser.

What happens during laser retinopexy?

Laser retinopexy is usually done in the outpatient clinic and takes about 5-20 minutes, although with examination, paperwork and allowing time for eye drops to dilate your pupil, the whole process will typically about 30–60 minutes. The dilating eye drops take a few hours to wear off, during which time your vision will be blurred, so do not plan to drive home after treatment.

Anaesthetic eye drops are put in your eye to numb it. You will then sit with your head and chin on a rest. Professor Jackson will place a contact lens on your eye, to help direct the laser beam to the back of your eye. Keep still during the procedure and only move your eye if and as directed. You will see very bright flashes of lights with each beam of laser and sometimes these are slightly uncomfortable, but each pulse of laser only lasts a tiny fraction of a second. If you need a break during treatment let Professor Jackson know. You may notice your vision fading during treatment due to the bright light, but it will return very shortly after treatment ends. Your eye may feel a bit gritty and be slightly red for about 24 hours, but if there is significant pain call Professor Jackson.

What happens during cryotherapy?

Cryotherapy is usually done in an operating theatre. It uses a small probe held onto the outside of the eye to create an ice-ball that travels through the outer layers of the eye and into the retina, where it creates a small scar that seals the retinal break.

It takes about 5-20 minutes to apply cryotherapy, but with admission, time for eye drops to dilate your pupil, injection of a local anaesthetic to numb your eye, and paperwork, the whole process may take 2-3 hours. Due mainly to the dilating eye drops your vision will be blurred after cryotherapy, so do not plan to drive home afterwards. Your eye will be red and a bit sore afterwards. Professor Jackson will usually give you some eye drops to help reduce eye inflammation and pain, such as dexamethasone four times daily for four days. You can use these eye drops for up to two weeks if your eye remains a bit red and tender.

Can I resume normal activities after laser treatment or cryotherapy?

Different tears and holes present different risks of retinal detachment, and advice may vary. Also, the clinical evidence on what poses too high a risk is not clear. However, as a general rule, Professor Jackson advises taking it easy until he confirms that the laser retinopexy or cryotherapy have had the desired effect, usually about 2 weeks after treatment. Until then gentle exercise and exertion are acceptable, but avoid activity that shakes or traumatises the eye. As an example, use of an exercycle would be acceptable, but a running machine might not. Once it is confirmed that laser retinopexy/cryotherapy is complete you can resume normal activities. However, it would be wise to avoid extreme activities such as boxing and sports where a blow to the eye is likely. Straining, lifting and flying are okay.

Symptoms of retinal detachment

Most retinal tears and holes do not cause retinal detachment, but if they do it is important to operate promptly. Therefore, if you get new floaters in your vision, worsening flashing lights or a shadow or veil coming over your vision, contact Professor Jackson immediately.

Any further questions?

If you have any further questions regarding retinal holes and tears and their treatment please do not hesitate to contact our office on 020 7060 1968.

Disclaimer

Whilst every effort has been made to ensure that the information in this leaflet is accurate and up-to-date, we cannot guarantee its completeness or correctness. It is not designed as a substitute for professional healthcare advice from a doctor.