Patient Information

Laser Retinopexy

Your eye doctor has told you that you have a retinal tear. This leaflet will help you to understand what has happened to your eye and the treatment that we can offer. You might want to discuss the information with a relative or carer. We will ask you to sign a consent form, so it is important that you understand the information in this leaflet before you agree to go ahead with the treatment. If you have any questions, you might want to write them down to help you remember to ask one of the hospital.

A retinal tear is a hole that forms in the outer part of the retina (Figure 1, arrow 1)

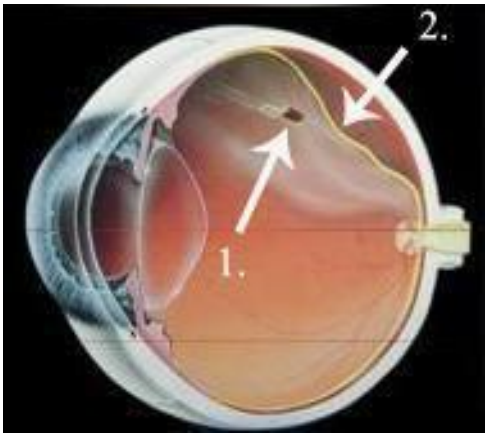


Figure 1 Retinal tear

Tears can happen due to the jelly inside the eye coming away from the retina (vitreous detachment) or trauma to the eye. Some people who are very short- sighted are at much greater risk of developing tears. We know from several studies that if retinal tears are left untreated, then there is a very high risk of developing retinal detachment (Figure 1, arrow 2). The retina can become detached because fluid from inside the eye is able to enter the tear, causing the retina to lift off from the underlying tissue below. To prevent this from happening, the doctor will seal the retina around the tear by placing laser spots around the hole, which then forms scar tissue acting like a barrier to prevent the retina from detaching. This procedure is called a laser retinopexy. It usually takes about 14 days for the scar tissue to develop.

How is it done?

You will be given drops to dilate your pupil after the doctor has explained the procedure to you. There are two ways which the laser may be performed, depending on the location of the tears in the retina.

An anaesthetic drop will be put in your eye. The doctor will then place a contact lens on the surface of your eye. This will focus the laser, which is then performed sitting upright on the slit-lamp. The anaesthetic "numbing" drops do not completely anesthetize the eyeball itself but should allow the contact lens to be placed comfortably on the surface of the eye.

1. If we are unable to laser via method 1 (usually as the retinal tear is too peripheral) we may need to refer you to York Ophthalmology department as they have different equipment. The method they may use is whereby the laser is through a special device worn on the doctor's head. This technique of "indirect laser" for treating retinal tears involves the use of an instrument to press on the wall of the eyeball in order to reach parts of the retina that contain the retinal tear. In this case, you will be asked to lie flat and the doctor will press on your eye using a small instrument to allow him/her to visualise the tear.
2. In both techniques, the doctor surrounds the hole/weak spot with laser (Figure 2). It is important that you keep your head still throughout the procedure. You will see a series of bright flashes.

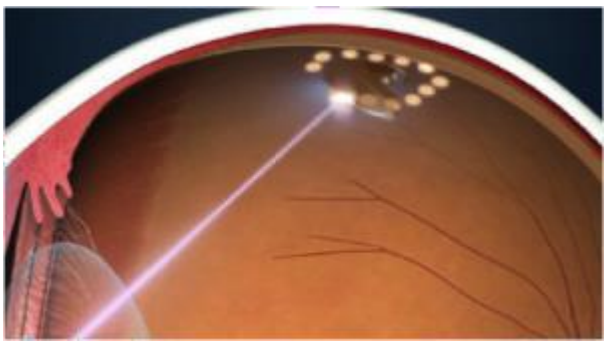


Figure 2: Lasered tear

Does it hurt?

The laser treatment itself can be associated with "stabbing", "sharp", and "aching" pains. Very occasionally, there can be a feeling of an "electric shock- like" feeling during the laser treatment. Although these sensations can be worrying, they do not indicate any adverse effects inside the eye related to the laser treatment. Depending on the amount of laser performed, you may also experience a headache after the procedure. Laser treatment with the use of a contact lens can occasionally cause redness of the tissues that cover the eyeball. This settles without any treatment within five days. If we have to "indent" or press on your eye-ball the eye-ball using a small instrument then this can cause redness of the tissues that cover the eyeball, but this also settles without any treatment within five days.

What happens after the treatment?

Immediately after the laser your vision will be dazzled as a result of the bright lights. Your vision will be misty for a few hours and should return to normal by the next day. You should not drive on the day of your laser. It is important to remember that laser retinopexy will not "get rid" of any pre-existing symptoms such as floaters that you experienced before your treatment. Sometimes the floaters may increase immediately after the treatment, but these will settle after a few days. There may be light sensitivity and glare outside.

What are the risks?

Since no incisions are made to the eye, there is no risk of infection inside the eye. Some patients experience a slight irritation after the procedure from the lens being placed

on the eye; however, this usually recedes quickly. As stated before, it is important that you do not move during the procedure. If you do, there is a possibility that the laser will affect a portion of your vision that it was not intended to (i.e. your central vision). There is also a very small possibility that the laser retinopexy does not completely seal the tear. Even after laser retinopexy, a retinal detachment can still form, though the possibility of one is greatly reduced with treatment.

Will I need a follow-up?

Yes, you will be reviewed in the out-patient clinic approximately two weeks after your laser treatment to check that the laser has worked.

Can the retina detach after laser retinopexy?

Laser retinopexy considerably reduces the risk of retinal detachment but it can still occur despite laser retinopexy. You should seek help immediately if you notice:

- New floaters (Any floaters in the vision that were present before the laser will still be there afterwards but with time will become less noticeable)
- Flashing lights in the eye
- A change in vision (like a curtain coming across).

If you experience these symptoms, please contact us as below:

How to contact us

Mon-Friday 09:00AM to 05:00PM (closed over lunchtime).

Please do not walk in to the Eye Clinic, but contact us first to arrange an appointment. Booking a PIFU (patient initiated follow up) appointment is straightforward. You can either:

Email us on: hdft.eyereferrals@nhs.net
Ring us on: 01423 542217

It is best to contact via email as the phoneline is very busy, especially on a Monday morning, and the email inbox is monitored closely.
Please provide your full name, date of birth, hospital or NHS number and telephone number.

You will receive a call back from a member of the Ophthalmology Team to help understand your question or concern, prior to booking an appropriate follow up or providing further information on how to manage your condition.

Sat-Sunday and Bank Holidays

Contact the on-call ophthalmologist via the hospital switchboard

In order to maintain the necessary contact with you, please ensure you notify the department of any changes to your contact details and mailing address.

For **appointment enquires** please contact the Appointments Team on 01423 553591 / 553573.

For **administrative enquires** please contact the secretaries as below:

caroline.dixon16@nhs.net – Tel: 01423 553565 - Mr Metcalfe - General

belinda.davison@nhs.net – Tel: 01423 553277 - Mrs Mackenzie/Mr Walters - Medical Retina

suzanne.lawson2@nhs.net – Tel: 01423 555705 - Mr Moosa/Mr Falzon - Paediatric

louisedaffern@nhs.net – Tel: 01423 553375 - Mrs Liput/Miss Darbyshire - Glaucoma/General

barbara.fairclough@nhs.net – Tel: 01423 553665