



The Spire Dunedin Hospital
22 Bath Road
Reading
Berks RG1 6NS
Secretary: Sally Allen
Tel: 0800 644 0900
sally@tanner-eyes.co.uk

The Circle Hospital
100 Drake Way
Reading
Berkshire
RG2 0NE

The Princess Margaret Hospital
Osborne Road
Windsor
Berks SL4 3SJ
PA : Shelagh Ferriman
Tel: 0800 644 0700 / 0118 922 6906
windsor@tanner-eyes.co.uk

Vitreotomy for Floaters Treatment Leaflet and Patient Consent Form

What are floaters?

Floaters are shapes that people can see drifting across their vision. Floaters are small bits of debris floating in the vitreous jelly inside the eye. They appear in a variety of forms such as small black dots, short squiggly lines or large cobweb shapes. Short sighted people tend to suffer from them more and they increase with age. Inflammation in the eye is a rare cause of floaters.

What causes Floaters?

The eye is filled with a jelly like substance called vitreous. The vitreous sits behind the pupil and lens. The jelly is made mainly of water with a meshwork holding it together. As we get older, a process known as vitreous syneresis occurs; the meshwork breaks down and pools of fluid form. The solid portion of the gel is left as debris. The debris casts shadows onto the retina, which are seen as floaters. In 70% of people, by the age of 70, the liquefied vitreous gel loses its support framework causing it to collapse. This process is known as a posterior vitreous detachment (PVD). As the vitreous gel peels away from the retina, it can cause people to see intermittent flashes of light. The flashing light will usually subside over 4 to 12 weeks, but in some patients it may take a little longer. When a posterior vitreous detachment occurs, people often become aware of a cobweb or net curtain-like floater that can be quite intrusive at first. These floater type symptoms usually improve over the first 6 months.

What complications could occur following vitreous detachment?

In the vast majority of cases floaters are harmless and represent the normal, natural (although occasionally annoying) aging change of the eye. They usually become much less obvious with time as the brain adjusts to the change and eventually filters them out. Rarely during the development of a posterior vitreous detachment, the vitreous gel can be stuck to a patch of retina and cause a tear. In some cases fluid can track through the tear, and behind the retina causing it to detach from the back of the eye a little like wallpaper peeling of a wall – a retinal detachment. This uncommon event occurs in approximately 1 in 10,000 of the population in general and usually requires urgent surgery.

Treatment options

Since floaters do not harm the eye and are usually well tolerated, surgery is not needed in most cases. However, some patients find their floaters particularly troublesome causing intermittent blur and problems with activities such as reading, driving or computer use. In this case it is possible to carry out an operation to the eye to remove the vitreous gel (vitrectomy), which will also remove the floaters. This course of treatment is useful in people with severe floaters who cannot adapt to them.

Will all my floaters be removed ?

It is impossible to remove all the vitreous gel and in some patients there are still a few floaters seen, particularly immediately after the surgery while the eye recovers. In the vast majority of people these mild symptoms are significantly better than before surgery and do not require any additional treatment.

What does the operation involve?

Vitrectomy surgery is a form of keyhole surgery performed under a microscope, using 3 small incisions (1-2 mm in size) in the white of the eye. Firstly the vitreous jelly is removed (vitrectomy), and then the retina is carefully checked for any new or pre-existing holes which are usually treated with cryotherapy (freezing) to create a scar and seal the peripheral retina down securely, preventing a retinal detachment. The operation is usually completed with insertion of an intraocular air bubble. This helps close the surgical incisions and the incisions often self seal without the need for external sutures. The air bubble usually lasts in the eye for 1-2 weeks.. During this time the vision will be very blurred as you cannot see through a gas bubble. If more extensive retinal breaks are found then a longer acting gas bubble may be used – up to 8 weeks

How long does the operation take and do I need to have a general anaesthetic?

This type of vitrectomy surgery usually takes 45 minutes and can be done with the patient awake (local anaesthetic), or asleep (general anaesthetic), usually as a day case procedure. Most patients opt for a local anaesthetic, which involves a numbing injection around the eye so that no pain is felt during the operation. This is sometimes supplemented with medication to reduce anxiety (sedation).

Do I have to posture face down after the operation?

No, this is not usual following vitrectomy for floaters. In some cases Mr Tanner may ask you to lie on one side to help push the gas within your eye against a weak area of retina after the operation.

Am I able to travel after surgery?

You must not fly or travel to high altitude on land whilst the gas bubble is still in the eye

If ignored, the bubble will expand at altitude, causing very high pressure resulting in severe pain and permanent loss of vision. In addition, if you need a general anaesthetic whilst gas is in your eye, then it is vital that you tell the anaesthetist so they can avoid certain anaesthetic agents which can cause similar expansion of the bubble. None of these exclusions apply once the gas has fully absorbed. You will notice the bubble shrinking and will be aware when it has completely gone.

How much time will I need off work?

Most people will need two weeks off work. Your vision is reduced while the gas bubble is in the eye and this also affects depth perception.

What are the potential complications of surgery?

As with any procedure there may be risks involved and you should discuss these fully with Mr Tanner prior to your operation. In a small minority, the vision may end up worse than before the surgery, and there is a very small chance of total loss of sight. Five specific complications of vitrectomy surgery, which you should be aware of, are outlined below:

- 1. Cataract:** this means that the natural lens in eye has gone cloudy. If you have not already had a cataract operation, you will almost certainly get a cataract after the surgery, usually within a year but it can happen very rapidly.
- 2. Retinal detachment:** the retina detaches from the back of the eye in 1-2% of patients. The vast majority of retinal detachments are repairable, but further surgery is required and this complication can lead to sight loss.
- 3. Bleeding:** this occurs very rarely, but severe bleeding within the eye can result in visual loss.
- 4. Infection:** this is also very rare and would be expected to occur in about 1 in 1000 patients, but if it occurs, can lead to visual loss.
- 5. Raised eye pressure:** an increase in pressure within the eye is quite common in the days after surgery, usually due to the gas bubble. In most cases it is short-lived and controlled with extra eye drops and/or tablets to reduce the pressure, preventing any harm coming to the eye. If the high pressure is extreme or becomes prolonged, there may be some damage to the optic nerve as a consequence. In the majority, this damage does not adversely affect the vision, but some patients require long term treatment to keep the eye pressure controlled.

Will I have to take any drops or medication after the operation?

Two types of drops are usually prescribed after surgery: an antibiotic/steroid combination (eg:Tobradex) and sometimes a pressure lowering drop (eg:Iopidine). Patients are usually seen in the clinic 1-2 weeks after the surgery. If all is well, then the drops are reduced over the following 2-4 weeks. If the eye pressure is raised following surgery, additional drops and/or tablets may be prescribed to treat this.

Will I have to get my glasses changed?

Most people will need to change their spectacle prescription at some point after surgery.

Consent

- Before agreeing to undergo vitrectomy surgery you will need to sign a consent form signifying that you understand the risks and benefits of the procedure.
- We encourage you to ask any questions which may arise before signing the consent form.

Please read this form carefully. If you have any further questions, please ask - we are here to help you. You have the right to change your mind at any time, even after you have signed the form.

If you experience eye pain or have any concerns:

Please contact Mr Tanner's team on 0800 644 0700 or 0800 644 0900.

Out of hours Main Hospital Switchboards are :

Princess Margaret Hospital, Windsor - 01753 743434

Spire Dunedin Hospital, Reading - 01189 587676

Circle Hospital, Reading - 0118 922 6888

Eye Casualty at Royal Berkshire Hospital, Reading - 0118 322 7162/3

PATIENT CONSENT

Patient details

The above explanation has been read by/to me. The nature of my eye condition has been explained to me and the proposed treatment has been described. The risks, benefits, alternatives, and limitations of the treatment have been discussed with me. All my questions have been answered.

- I hereby authorise Mr Tanner to carry out VITRECTOMY SURGERY to my LEFT or RIGHT eye**

Patient's Signature

Date

Confirmation of consent

I have confirmed with the patient that he or she has no further questions and wishes the procedure to go ahead.

Mr Vaughan Tanner Date

