



Patient Information Leaflet – Glaucoma Procedures

iStent

What is iStent?

The iStent is a tiny (1mm long) titanium tube that is implanted into the eye to lower intraocular pressure and reduce the need for eye drops in patients with glaucoma. It is the smallest surgical device used anywhere in the human body and one of a range of new Minimally Invasive Glaucoma Surgery (MIGS) procedures.



How does iStent work?

Glaucoma is usually due to raised pressure within the eye, which occurs due to reduced drainage of fluid (aqueous humour) through the eye's natural drainage channels. The iStent is inserted into the eye's natural drainage channel – the trabecular meshwork. The aqueous humour is then able to drain through the iStent. Insertion of the iStent involves a short procedure often combined with cataract surgery. The procedure is carried out as a day case procedure.

Why have the iStent?

The aim of the iStent procedure is to reduce intraocular pressure and reduce the need for glaucoma eye drops. iStent will not cure your glaucoma or reverse any loss of vision that has already occurred but it may help prevent glaucoma getting worse.

What is the success rate?

A large randomised study in the USA, involving almost 250 patients, randomly assigned patients to have cataract surgery alone or cataract surgery with iStent. Two-thirds of patients treated with iStent had at least a 20% reduction in intraocular pressure compared to only half of those having cataract surgery alone. Most patients were able to reduce the number of glaucoma medications they were taking, although some needed to restart glaucoma medications over the next 2 years. A UK study found iStent resulted in a reduction in intraocular pressure from an average of 21 mmHg before surgery to 16.7 mmHg after - an average 30% reduction. As current studies have stopped at 2 years, the long-term success of iStent is uncertain.

Is the iStent suitable for everyone?

The iStent is not suitable for all types of glaucoma and is not suitable for all stages of the disease. It is most suited for people with open angle glaucoma.

Before the operation

Please continue any eye drops for your glaucoma as prescribed unless directed otherwise by your ophthalmologist. Please also continue any tablets you normally take. If you take any blood thinning medicines such as warfarin please discuss this with Dr Tatham.

During the operation

Implantation of an iStent takes only 5 – 10 minutes. It is often performed at the end of cataract surgery but can also be done alone. The operation is usually performed under local anaesthetic using eye drops to numb the eye (topical anaesthesia).

After the operation

After the operation your eye will be covered by a protective plastic shield. Please keep the shield over the eye until the morning after surgery. Do not worry about using any eye drops in the operated eye until after removing the shield the morning

after surgery. Any eye drops that you use in your other eye must be continued as normal.

The morning after your operation you can remove the protective eye shield and gently bathe your eye. You can then start the post-operative drops to the operated eye. You will have two types of drop – an antibiotic and a steroid, which will need to be used for approximately 4 weeks after your operation. Please stop your normal glaucoma drops in the operated eye so we will be able to assess the effect of the iStent. You may need to restart these at a later date.

Each time you attend the clinic any changes to your eye drops will be discussed with you. If you are running out of the drops you must obtain a repeat prescription for them from your own family doctor (GP).

You will usually be reviewed in the eye clinic one week after the operation and then again at one month.

Are there any risks or side effects of this treatment?

The iStent is made from non-magnetic titanium, the same material used for replacing heart valves so it will not cause an allergic reaction or be rejected by the body. As it is non-magnetic it is safe for you to have an MRI scan in the future if needed. The iStent will not set off airport scanners!

The risks of iStent are small. A very small amount of bleeding may occur inside the eye during the operation but this resolves within a few days. You will be given anti-inflammatory and antibiotic eye drops to use after your operation to prevent inflammation and infection.

Activities after surgery

It is important not to rub or press on your eye after surgery. As this may happen accidentally when you are sleeping please continue to wear the plastic shield over your eye at night for the first week after surgery. Most people need one to two weeks off work after surgery but you may need longer if your work involves heavy lifting or labour. Other activities will depend on whether you have also had cataract surgery. You should avoid the gym for 2 to 3 weeks and swimming for 4 weeks. Depending on vision in your other eye you may be able to drive within a day or two. There are no long-term restrictions following iStent surgery.

Contact information

The information in this leaflet is intended as a guide only as each patient's

experience will be different. If you require any further information or are concerned about your eye following treatment, please contact my secretary at Princess Alexandra Eye Pavilion - the telephone number is 0131 536 4160. If you are unable to speak with my secretary please contact the Acute Referral Clinic (ARC) at the Eye Pavilion on 0131 536 3751. The Acute Referral Clinic is open weekdays from 9.00 am to 5.00 pm. At weekends or out of hours please contact your GP, optometrist, or Accident and Emergency at the Royal Infirmary who will be able to contact a member of our on call ophthalmology team for further advice.

Private Patients

Please contact The Edinburgh Clinic on 0131 447 2340,
www.edinburghclinic.com.