

Patient information

Trabecular Stent Bypass Microsurgery (iStent)

Ophthalmology Department – Aintree Hospital

Who is this leaflet for?

This leaflet is for people with glaucoma and/ or raised eye pressures who are having trabecular stent bypass microsurgery.

What is a Trabecular stent bypass microsurgery?

A surgical procedure that improves the drainage of fluid from the eye.

Trabecular What?

- Trabecular- the start of the drain of the eye.
- Stent- a hollow tube like a snorkel
- Bypass- i.e. it bypasses the blockage in the drain which is causing your eye pressures to be raised or your glaucoma to be getting worse.
- Microsurgery- very fine surgery

**What does it look like?**

- Size: approximately 1 mm x 1/3mm
- Weight: approximately 60 micrograms
- Snorkel diameter: 120 micrometers.

Why do I need it?

- The eye's drain is not working well.
- If the drain is not working properly then the fluid in the eye is not drained from the eye properly and the eye pressure goes up.
- High eye pressure can cause glaucoma, or glaucoma can worsen.
- Perhaps your doctor is trying to get you to come off the eye drops.
- This may be because you find the drops difficult to do, or perhaps they irritate your eyes greatly.
- Perhaps laser treatment(s) have not worked, or are unsuitable for you.

I only have high pressure in my eyes, not glaucoma. Can I have an iStent?

- Yes. You are an ideal candidate.

I have narrow drainage angles. Can I have an iStent?

- No. You need to have open angles.
- The 'angle' refers to the eye's drain.

What is the benefit of iStent?

- To lower the eye pressure.
- To replace any eye drops.
- To prevent more complex surgery

Why iStent instead of other surgery?

- iStent insertion is easy to combine with cataract surgery and is quick.
- Conventional forms of glaucoma surgery typically take 45-75 minutes.
- Conventional surgery is harder.
- As a result, the risk are higher.
- Also, the recovery from conventional surgery is longer.

How does it work?

The start of the drain of the eye is like a sieve. This sieve is blocked so the fluid cannot get through.

By putting this hollow tube through the sieve, flow of fluid resumes.

Your eye surgeon may combine this operation with a cataract operation. Please see the cataract surgery leaflet for further information.

What are the alternatives to surgery?

There are three ways to lower the pressure inside the eye long term: eye drops, lasers and operations.

You may already be using eye drops, but they did not lower the eye pressure enough, or you are getting unpleasant side-effects.

Some patients find it hard to get the drops into the eye or are forgetful. This makes your glaucoma worse.

Laser surgery may have been tried already, or you may not be suitable for laser treatment.

What will happen if I don't want surgery?

Then your eye surgeon will suggest more eye drops to lower the eye pressure, or a laser procedure. If surgery is offered, it is the best option for your sight.

Is the surgery guaranteed to work?

No. In certain cases, the blockage is elsewhere so treating you like this will not improve eye pressure. We do not know until we try.

If the iStent does not work, your eye pressure will remain the same as before the surgery.

What happens when I come in for surgery?

- You will be in hospital for half a day.
- You will receive eye drops before the surgery. These eye drops make the procedure easier and safer.
- The operating session lasts four hours. Usually, there are four or five patients like you who will be operated on by the same team of surgeons. Most of the time is spent waiting.
- When it is your turn, you will have an injection around the eye to freeze it.
- If you are nervous about the surgery, you may be offered a tablet to relax you or, you may have chosen to have sedation during the operation.
- Or, you will have a general anaesthetic, so that you sleep through the surgery. This is unusual.
- The surgery takes five minutes, though is usually combined with cataract surgery, totalling around 30 minutes.
- This is around half the time it takes to do conventional surgery.

What does it feel like?

Following the surgery, you will have a plastic shield until the following morning.

The eye usually feels a bit gritty for the first few days. Feel free to take some painkillers as necessary.

The sight in the eye is often blurred for up to two to three weeks. This is normal.

What should I do about my medication?

All medication, including any regular eye drops, should be taken on the day of surgery.

After the operation, you will be asked to stop your glaucoma eye drops in the operated eye only.

You will be given antibiotic and anti-inflammatory eye drops for the operated eye for a few weeks.

The hope is that you do not need eye drops after surgery, or that your glaucoma is stable with eye drops.

What are the risks and possible complications of surgery?

Inflammation

The eye can become red or sore following the surgery. This is why you will be prescribed anti-inflammatory drops.

Infection

This is rare. You will be prescribed antibiotic drops following the surgery to reduce this risk.

If you get an infection, this can be very dangerous to your eyesight. If the eye is very painful following surgery, you must ring us for advice.

Return to theatre

Rarely, the iStent's position needs adjusting. This would mean returning to the operating theatre.

Failure

The eye pressure does not always fall after surgery. If this happens, you may need a second operation, more eye drops or laser.

Bleeding

This often occurs during insertion of the iStent. It may make your vision blurry for a few days. Like a bruise, it goes over one to two weeks.

High eye pressure

May occur in some cases. We may check for this the day after surgery.

What happens after the operation?

- Once you feel OK, you can go home.
- The operated eye will have a clear plastic shield on, so you may need some assistance to get around.
- Or, you may have a check-up one to four weeks after surgery.

What should I expect after surgery?

There might be some discomfort as you have just had an operation. Feel free to take some painkillers. If you are unsure what you can take, ask one of the nurses or your GP.

Post-operative Instructions: iStent.

- Reading, TV/ computer are fine.
- Wait until we say you can drive.
- Keep the eye dry for two weeks. This is to reduce the chance of infection.

Feedback

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

Further information

Who do I contact if I have questions or concerns?

In an emergency:

Tel: 0151 525 5980

Secretary for Mr. Dubois:

Tel: 0151 529 0147

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