

Hydrus Microstent Surgery

Information for Patients

Royal Gwent Hospital Glaucoma Service

You may have been told that you would benefit from an operation with a Hydrus Microstent to control the pressure within your eye. This involves inserting a glaucoma drainage stent within the natural drainage channel (Schlemm's canal) in the eye. This helps to drain fluid from the eye and reduce eye pressure.

If your eye pressure remains high, this can cause irreversible loss of vision due to glaucoma. This operation will not cure glaucoma or restore vision lost by glaucoma. Instead, it aims to prevent or slow further loss of vision. It can also reduce the need for eye drop medication, and may prevent the need for further glaucoma surgery.

What is Hydrus Stent surgery?

The Hydrus ("High-druss") Microstent is a small flexible scaffold device that is inserted into the main natural drainage channel of the eye (Schlemm's canal) to lower eye pressure and control glaucoma. It is about the size of an eyelash and you will not see or feel it after surgery. It is made of a metal alloy (nitinol) used in other medical implants including heart stents. It does not cause an allergic reaction, will not set off airport scanners, and is safe if you need an MRI scan.

Who is suitable for a Hydrus Microstent?

People with mild to moderate severity open-angle glaucoma, who are taking glaucoma drops and are undergoing cataract surgery, are best suited to surgery with the Hydrus Microstent. It is not suitable for people who have had damage to the natural drainage system of the eye.

What is involved?

Implantation of the Hydrus stent takes only 5 minutes. This is usually combined with cataract surgery, but can also be carried out as a single procedure. Most people have the surgery performed under local anaesthetic, meaning you are awake but your eye is numb so you will not feel anything.

What are the benefits of the surgery?

The Hydrus Microstent reduces eye pressure and can reduce the need for drops in people with mild to moderate glaucoma. It is faster and less invasive than traditional glaucoma surgeries. It may also slow the worsening of visual field (peripheral vision) that happens with glaucoma, and reduce the likelihood of needing further glaucoma surgery in future.

After the operation

The eye will be covered by a protective clear plastic shield. You should wear this at night for the first week, to prevent accidental injury during sleep.

You will be given new (anti-inflammatory and antibiotic) eye drops which usually start the day after surgery and continue for 4-6 weeks. If you are running out of drops, you must obtain a repeat prescription for them from your own GP.

Eye drops used in the other eye **must** continue as normal. You should not continue glaucoma drops in the operated eye unless you are advised to do so. You should start a new unopened bottle if so.

Your eye may be a bit bloodshot and swollen for a few days. The vision may be a bit blurry for 1-2 weeks. You may read, do screen work or watch television: these will not harm the eye.

You should avoid strenuous activity for the first month after surgery including swimming, jogging, and contact sports. Most people take 1-2 weeks off work after surgery, but this will depend on the nature of your work.

It is safe to fly after surgery, however your doctor will want to review you regularly in the early postoperative period.

What are the risks?

It is normal to have a small amount of bleeding within the eye during the surgery; this usually settles within a few days. Rarely, the stent may come out of position or become blocked.

If the stent fails to control your eye pressure it will not create any additional harm to the eye: however, you may need to increase glaucoma medications or need another procedure to control eye pressure.

Are there any alternatives?

The iStent, Trabectome, and OMNI procedure are other minimally-invasive procedures that can be carried out at the time of cataract surgery to lower eye pressure in people with open-angle glaucoma.

Non-surgical alternatives include a laser procedure called selective laser trabeculoplasty, and continuing or increasing glaucoma eye drops.

Contact Information

Please contact us immediately if you experience:

- Loss of vision
- Your operated eye becomes increasingly red or painful

If you require further information or advice, please contact Mr Kirk's secretary:
01633 656279

For urgent medical queries you can contact the Emergency Eye Department: 01633 238856.

For appointment enquiries, you can contact the Booking Office: 01495 767055.