

Patient Information

Ophthalmology

Having an OMNI® surgery to treat glaucoma

This booklet aims to give you information about your glaucoma surgery (OMNI® Surgical System)

What is Glaucoma?

Glaucoma is a condition of the eye where increased pressure within the eye causes damage to the nerve that allows you to see (optic nerve). This can then lead to some loss of vision. You may not know that you have glaucoma until you have lost a lot of your sight, as there are usually no known early warning symptoms.

Unfortunately, drops or glaucoma surgery cannot restore vision that has already been lost. The aim of treatment is to reduce the pressure in the eye to prevent or slow down further damage to the optic nerve and so protect your vision from getting worse.

What is OMNI® Surgical System?

The OMNI® Surgical System is a minimally invasive surgical option which aims to reduce the pressure in the eye. 'Minimally invasive' means that tiny incisions and microscopic equipment are used. These procedures are generally safer compared to traditional invasive surgery.

Just like a clogged sink, a blockage can occur at several parts of your eye's natural drainage system. The OMNI® Surgical System helps to relieve the pressure build up in the eye, by removing blockages in the area called drainage angle. This facilitates drainage and lowers the eye

pressure. Less resistance to fluid leaving the eye means less pressure on the optic nerve and preserving your vision.

The OMNI® Surgical System is recommended for:

- adult patients with open angle glaucoma
- Mild, moderate and advanced glaucoma
- Can be combined with cataract surgery or performed as stand alone

Exceptions Include:

- Angle closure glaucoma
- Traumatic, malignant, uveitic or neovascular glaucoma or discernible congenital anomalies of the anterior chamber angle

Why do I need it?

The OMNI® Surgical System is aiming to reduce the pressure inside the eye and therefore prevent or slow down further damage to the optic nerve. It will not cure your glaucoma, reverse any damage already caused by glaucoma or bring back any lost vision.

How does it work?

Glaucoma can cause a build-up of fluid pressure inside the eye. This build-up of fluid pressure is caused by a blockage of the natural drainage channel of the eye. This pressure can damage the optic nerve which carries images from the eye to the brain affecting your vision. The fluid produced inside your eye is called aqueous humour.

This standard procedure involves a small incision in the clear part of the eye (cornea), dilatation of drainage system and removal of blockages. This minimally-invasive procedure means fewer complications and faster patient recovery compared with traditional surgery. The OMNI® Surgical System does not need simultaneous cataract surgery to be effective.

- The procedure does not change the appearance of the eye
- The OMNI® Surgical System is implant-free procedure

- The procedure takes between 15-20 minutes.

Your eye surgeon may combine this operation with a cataract operation.

Is the surgery guaranteed to work?

The OMNI® Surgical System is proven to be safe and effective, with results sustained into the longer-term. Clinical results show average eye pressure is still reduced by around 33% two years after surgery. Around 33% of patients don't need to use any drops, and 75% of patients continue to have their eye pressure controlled between 6-18mmHg without increase in medications, two years after the procedure.

*ROMEO Study
KLABE Study
TREY Study
GEMINI Study*

Are there alternatives to surgery?

Generally speaking, there are three ways to lower the pressure inside the eye on a long-term basis: eye drops, lasers and surgery.

You may already be using eye drops, but they did not lower the eye pressure enough, you are getting side-effects or you find it difficult to use the drops. The surgery is used when eye drops and lasers have not worked or are not suitable.

The traditional surgery is called trabeculectomy. The surgeon creates a small cut through the white of the eye (sclera) to allow the fluid to drain into a blister or 'bleb'. The fluid is then reabsorbed back into your bloodstream.

The OMNI® Surgical System technique that is being offered to you is a new technique. We are offering it to you because it is less invasive than the traditional Trabeculectomy surgery with less recovery time.

What if I don't want surgery?

You may be suitable for a laser procedure or you may need more eye drops. However, this may not control your Glaucoma and your vision may continue to get worse.

Preparing for the operation

Please continue to use any eye drops and tablets for your glaucoma as prescribed, unless directed otherwise by your Ophthalmologist. If you take any blood thinning medication (e.g. Warfarin) or have had bleeding problems in the past please discuss this with your Ophthalmologist before your surgery.

Before your operation you will be asked to attend a pre-operative assessment appointment to check you are fit for the procedure and anaesthetic.

What happens at the time of surgery?

The operation is usually performed under a local anaesthetic, meaning that you are awake but your eye is numb so you will not feel anything. Your eye will be numbed with eye drops and then a small injection will be given around your eye. The injection may cause a pressure sensation and brief discomfort. The local anaesthetic takes several hours to wear off and may affect your vision during this time.

You can ask for a general anaesthetic so that you are fully asleep during the operation.

What happens after the operation?

You can go home when you feel ready. Your eye will be covered by a protective plastic shield which you can take off the morning after surgery. You don't need to put drops in your eye until after the shield has been taken off.

The morning after your operation you can take the shield off and gently bathe the eye with the solution provided by the nurse. You can then start the post-operative eye drops.

We will usually see you in the eye clinic one week after your operation and again a month later. We may also need to see you on a frequent basis during the next 3 months after the surgery.

What about my medication?

If you are using drops in the other eye you should continue to do so unless told otherwise.

Please stop your normal glaucoma drops in the operated eye so we can assess the effect of the OMNI® Surgery. You may be asked to restart the drops later, depending on the pressure in your eye after the operation.

You will need to use two different drops in your operated eye to help it recover from the surgery. These are an antibiotic and a steroid. You will need to use these for about 1 month after your surgery.

What are the risks and possible complications of surgery?

Serious complications are uncommon. You could have a small amount of bleeding inside your eye. If this happens, your vision could be blurred for a few weeks.

The effect of the OMNI® may wear off with time. This is most often due to scarring. We do not have enough data to suggest the likelihood of this with OMNI®.

The following are (rare) glaucoma surgery risks or side effects to discuss with your doctor:

- Vision loss (1:1000)
- Bleeding in the eye (usually self-resolving after few weeks)
- Infection
- Low eye pressure (or hypotony) – usually resolving after couple of weeks. Occasionally requires another surgery.
- Eye pressure too high – this may require another method of treatment.
- Scarring of the drainage system
- Cataract formation

There is a very rare risk of infection after OMNI® surgery which in very rare cases may cause blindness.

There is a low risk of low pressure after OMNI® surgery, which is less than that after Trabeculectomy (about 15% of cases) and if that happens, you may need another surgery to fix this.

How should I look after my eye after surgery?

- You must not rub or press on the eye after surgery. To help stop this happening while you are asleep, you should wear the plastic shield at night for the first week after surgery.
- You can read, watch TV & use a computer as normal.
- Do not drive until your surgeon says it is OK to do so.
- Most people need 1-2 weeks off work after surgery.
- Keep the eye dry for 2 weeks. This is to reduce the chance of infection.
- Please wear goggles if swimming after complete healing of your surgery (which usually takes about 1 month).
- It is safe to fly after the surgery, however you will need to be seen couple of times by your surgeon in the month.

Who do I contact if I have questions or concerns?

In an emergency:

Within normal working hours – phone 01423 542217 and ask to speak to the Eye Triage Team.

Outside normal working hours – Go to the main Emergency Department (A&E).

For general queries, please call:
Ophthalmology Secretary on 01423 553375