# XEN

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## What is the XEN Gel Implant?

The XEN Gel Implant is a very small flexible tube made of porcine gelatin that creates a new pathway for fluid to drain from the eye, reducing eye pressure.

The XEN Gel Implant is 6 mm in length and nearly as thin as a strand of human hair. The gelatin material is well accepted by the human body.

### Who is suitable for a XEN Gel Implant?

The XEN Gel Implant is best suited to patients with open angle glaucoma where eye pressures cannot be adequately lowered with eye drops or laser.

#### Eye words to know

**Aqueous**: A clear fluid that circulates inside the front portion of the eye.

Conjunctiva: A thin membrane that covers the white part of the eye.

Cornea: A clear, dome-shaped window at the front of the eye.

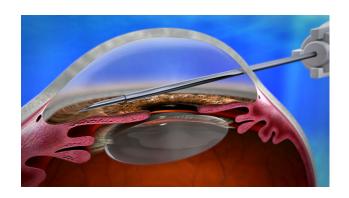
**Intraocular pressure**: The fluid pressure inside the eye.

**Glaucoma**: A condition that damages the optic nerve of the eye, often associated with high eye pressure.

The XEN Gel Implant can be used in patients with mild and moderate glaucoma but should be used with caution in patients with very advanced glaucoma.

#### How does it work?

Glaucoma is commonly associated with a buildup of fluid pressure inside the eye. Eye pressure increases because the eye's fluid drainage channels become blocked.



The XEN Gel Implant is placed in your eye to make a new permanent pathway to allow excess fluid to drain from inside the eye into a small blister (or bleb) under the skin of the eye (conjunctiva), just under the upper eyelid. You will not normally see the bleb. However, if you look in the mirror and raise your upper eyelid, you may be able to see the bleb. The fluid drained from inside the eye is different from tears.

### What are the benefits?

The XEN Gel Implant is designed to lower eye pressure and reduce the risk of vision loss from glaucoma. The procedure to insert the XEN Gel Implant is faster, more straightforward, and less invasive than traditional operations for glaucoma. The procedure is performed through a microscopic incision in the clear window of the eye (cornea). Unlike traditional surgery, scissors and stiches are not required. In a clinical trial, eye pressure was reduced by 30% at 1 year in patients who had the XEN Gel Implant and medication use was reduced by 75%. In some people the XEN Gel Implant may become blocked or need repositioning. This can often be done in a quick and painless in-office procedure. Occasionally a return to theatre may be required.

The XEN Gel Implant will not cure your glaucoma, reverse any damage already caused by glaucoma, or bring back any lost vision.

## What does the operation involve?



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. You will have the option of requesting light sedation. The local anaesthetic takes several hours to wear off and may affect your vision during this time.

The procedure can be performed by itself or combined with cataract surgery.

The XEN Gel Implant is injected through a small self-sealing incision in the clear part of the eye using a special injector. The procedure takes approximately 10 minutes.

During the procedure a medication called mitomycin C may be applied. This is used to reduce scarring and is designed to help enhance the long term success of the operation.

At the end of the procedure your operated eye will be padded and covered with an eye shield. If your unoperated eye does not see well, your operated eye may not be padded and instead covered with a clear plastic shield.

You will usually be able to go home the same day as your operation. Most patients will need to be examined the day after surgery.

### How soon will I recover?

Following surgery your eye may be slightly blood shot and swollen for a few days. Your vision may also be blurry for 1 - 2 weeks after the procedure. You may read and watch television; these activities will not harm your eye.

You will generally have no sensation from the presence of the bleb.

You will be given new anti-inflammatory and antibiotic eye drops to prevent inflammation and infection. The anti-inflammatory drops will normally need to be continued for 3 months.

The XEN Gel Implant will begin to work straight away to lower your eye pressure and you can stop taking your glaucoma drops in the operated eye. Any drops you use in your other eye must be continued as normal.

As with all eye surgery, you should avoid strenuous activity for the first month including swimming, tennis, jogging, and contact sports. Most people take 1 - 2 weeks off work after surgery, however the length of time will depend on the nature of your work.

You will be asked to wear a shield over your eye at night for the first week or so, to prevent accidental injury to your eye whilst you are asleep.

It is safe to fly after surgery, however you will need to be seen regularly by your surgeon in the early post-operative period.

### What are the risks?

Serious problems such as bleeding or infection are fortunately rare.

There is a risk the Implant could become blocked or come out of position. If the tube becomes blocked you may require a minor procedure in the outpatient clinic or to return to theatre.

In some cases the XEN Gel Implant may not lower eye pressure or its effect may wear off with time. If the XEN Gel Implant fails to lower your eye pressure it will not create any additional harm to your eye. However, you may need to restart your glaucoma medications or have further procedures to control your eye pressure.

Rarely, you may be aware of the drainage bleb. If this is causing pain or discomfort, steps may need to be taken to make the bleb more comfortable.

### Are there any alternatives?

The alternatives to XEN Gel Implant insertion are traditional glaucoma operations such as trabeculectomy or aqueous shunt implantation.

### References and Disclaimer

1. Reitsamer HA, Lenzhofer M, Hohensinn M, Höh. Ab Interno Approach to Subconjunctival Space: First 567 Eyes Treated With New Minimally Invasive Gel Implant for Treating Glaucoma. ASCRS/ASOA Annual Symposium and Congress; 2015 Apr 17-21; San Diego, CA.

This leaflet is for information only and should not be used for the diagnosis or treatment of medical conditions. Consult your ophthalmologist for further information.