

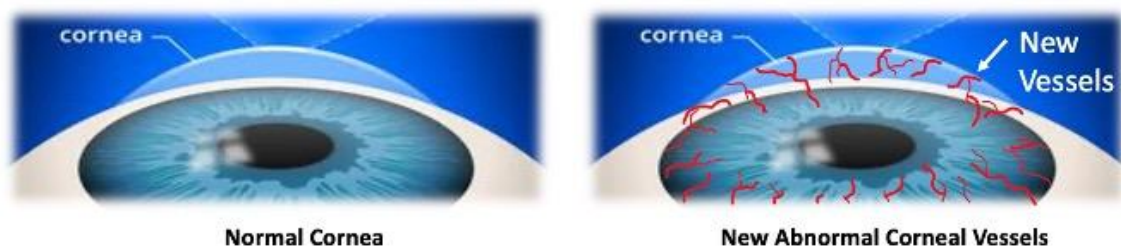
Subconjunctival Bevacizumab Injection and Fine Needle Diathermy (FND)

Important Information for Patients

Introduction

The cornea is the transparent window at the front of the eye, which allows light to travel to the back of the eye. Unlike many other organs in the human body, the cornea does not have blood vessels. This is essential as it keeps the cornea completely transparent and allows for optimal vision.

Corneal Neovascularization is a condition where new blood vessels form on the cornea, making it less transparent and blocking light from passing to the back of the eye. Hence, this process causes your vision to get worse. This condition can be your body's response to previous corneal problem such as inflammation, lack of oxygen, trauma or other medical conditions.



What treatment will help with my condition?

Treatment for corneal neovascularisation utilises two different options: a fine needle for diathermy (sealing off the blood vessels) and injection of a drug called Bevacizumab.

Fine needle diathermy (FND) involves a fine needle attached to a heated probe. The needle is passed through and near the unwanted corneal blood vessels so that they are sealed off. Typically, the heated needle will be in contact with the vessel for only a couple of seconds.

Bevacizumab (Avastin) is an injection, which works by blocking a substance called vascular endothelial growth factor (VEGF), and is also known as anti-VEGF agent. VEGF promotes the growth of the new vessels on the cornea. The injection is given on the surface of the eye, underneath the conjunctiva (the surface layer over the white of the eye) and it helps stop VEGF from producing these new, unwanted vessels. There is good

evidence that this Bevacizumab injection is safe and effective for the treatment of corneal neovascularisation and it is routinely used by eye doctors for this purpose. As corneal neovascularisation is a relatively rare condition, Bevacizumab has not been technically licensed by the manufacturer for this purpose and so it is used in what is known as an “off-label” manner. However, we have carefully considered its use and think that it is safe and appropriate to be used in this way.

Your eye doctor can use one of the treatments alone or the two in combination. It is likely both procedures will be used together in order to give you greater chance of stopping your condition from progressing.

Why do I need this operation?

The aim of fine needle diathermy and Bevacizumab injection is to treat the blood vessels on the cornea. If the blood vessels are left untreated then there is a high risk that they will cause loss of vision, which may be permanent.

How is the operation performed?

The operation is usually done with you awake. You will be given a local anaesthetic to the eye to make it numb so that the operation should not be painful, although you may be aware of some pressure sensation. During the operation your face is covered with a sterile drape. If you are claustrophobic or think this might be a problem, you should let us know. The operation takes less than half an hour to perform. You should be able to go home on the same day after the operation.

If you had a general anaesthetic, you will need to stay in hospital until you have fully recovered from the effects of the anaesthesia. This may take a few hours, during which your progress will be monitored.

What are the risks of the operation?

Every operation carries some possible risk. Most corneal neovascularisation surgery goes well with no serious problems. However, possible complications which can occur are outlined below.

- **Bleeding:** You may have a slight bleed on the surface of the eyeball, called a sub-conjunctival haemorrhage from the injection. This will heal on its own within five to seven days.
- **Recurrence:** It is not common, but the surgery can be repeated if necessary.
- **Pain or discomfort:** Some pain is common in the first 24-48 hours. Regular headache medication can be used, such as paracetamol, and the drops given out after the operation will also help.
- **Inflammation:** This may occur with any eye operation. Steroid drops are provided after surgery to help reduce inflammation.

- **Corneal ulceration or infection:** Sterile instruments are used during the procedure and antibiotics are given after the operation to help prevent this happening. Further treatment can be given if necessary.
- **Others:** Other complications are rare but can involve thinning of the eye, perforation of the eye, poor vision, and the need for further surgery.

How will I feel after the operation?

There is usually some discomfort initially, but this normally subsides after a few days. The eyesight in the operated eye is usually blurry at first but this also improves as the surface heals. If at any stage the eyesight deteriorates, the discomfort increases, or if you have any concerns please contact the hospital (see end of leaflet for details).

What do I need to do once I get home?

A pad will be covering your eye, which should remain in place until the following morning. After this you should take the eye drops as directed. If you wear contact lenses, please refrain from using them until advised by the eye specialist.

Look out for signs of infection, including redness and pain. If this occurs, please contact the hospital as below.

What should I avoid?

Avoid rubbing the eye. Try to avoid getting tap water into the eye for one week. Avoid swimming for at least 2 weeks to avoid the risk of infection. Please refrain from any sports or activities that put your eye at risk for at least 1 month.

When can I resume my normal activities?

Depending on what work you do we suggest you plan to be absent from work for around one week as the eye heals. Please ask if you would like to discuss this further.

Contact telephone numbers

In case of urgent problems telephone Leighton Hospital Switchboard on 01270 255141 and ask for the Emergency Ophthalmology Triage Nurse on call.

Available Monday to Friday, 9.00am – 5.00pm (excluding Bank Holidays)

Out of these hours, telephone Leighton Hospital Switchboard and ask for the Ophthalmologist on call.

Secretary for Mr Hu (Consultant, Ophthalmologist):

Tel; 01270 612306

Eye Care Centre

Leighton Hospital

Middlewich Road

Crewe, Cheshire, CW1 4QJ

This information is available in audio, Braille, large print and other languages. To request a copy, please ask a member of staff.

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