Anti-VEGF injection treatment

You have been given this factsheet because your doctor has recommended anti-VEGF injection treatment for your eye condition.

VEGF stands for vascular endothelial growth factor, which is one of the chemicals involved in growing new blood vessels in the eye. Anti-VEGF treatment is used to treat some conditions that cause unstable, abnormal blood vessels to grow and leak under the retina (thin layer of cells at the back of the eye), which in some cases can lead to a rapid loss of central vision.

These conditions include:
- wet age-related macular degeneration
- diabetic macular oedema
- retinal vein occlusion

What does the treatment involve?
A series of injections of anti-VEGF medicines are given into the back of your eye to stop the blood vessels there leaking blood or fluid. This helps to prevent damage to the back of the eye and loss of central vision. The treatment is highly effective in preventing further loss of central vision in up to 90% of eyes that have been treated.

If I’m suitable, what treatment will I receive?
Currently there are three treatments available: Eylea, Lucentis and Avastin. Your ophthalmologist will decide if the treatment is appropriate for you and determine which drug will be used, based on scans and photographs of the back of your eye.

We’ll also consider your vision, the extent of any damage (scarring) at the back of your eye, and your personal circumstances.
What happens during the treatment?
The drug is injected into your eye using a fine needle. Minimal discomfort is to be expected (equivalent to having blood taken from your arm).

The procedure takes ten to fifteen minutes, but the injection itself is over in less than ten seconds.

You will be invited to lie down comfortably on the couch. Local anaesthetic drops will be applied to numb your eye and minimise discomfort. Your eyelids and surface of the eye will be cleaned to prevent infection. Further anaesthetic will be given, and a small clip used to keep the eye open. The injection site will be marked, and a few seconds later, the injection will be given.

A member of the team will assess your vision after the injection, by asking you to state how many fingers the injector is holding up, and drops of sterile water will be instilled to reduce any irritation.

Who will give the injection?
It will be performed by either an ophthalmologist (specialist eye doctor) or a trained, registered allied health professional, such as a nurse, orthoptist or optometrist.

What happens after the treatment?
You will be allowed to go home immediately. We may give you some drops to take home if you report any discomfort, and may also check your eye pressure before you leave. Your next appointment is sent to you by post. Your GP will be sent a letter after every visit.

How many injections will I need?
Most patients require a course of three injections, at four week intervals. After the first three injections, the majority of patients will require further injections depending on how severe the leakage is at the back of the eye. You will need to be reviewed regularly to ensure you receive the maximum benefits of treatment.
What are the risks of having the treatment?
As with any medical procedure, there is a small risk of complications following anti-VEGF treatment. Your doctor will be able to discuss the risks and benefits specific to you, but for most patients the benefits of treatment outweigh the risks. Most complications that occur are from the administration of the injection.

The following are the major potential risks and side effects of injections, but this is not a complete list of all risks.

**Very rare (1 in 1,000 cases)**
- serious eye infection
- serious inflammation inside the eye
- blindness

**Rare (1 in 100 cases)**
- detached retina
- increase in eye pressure
- blood clots and bleeding in the eye
- corneal abrasion (scratch on the eye’s surface)
- cataract

Significant loss of vision due to this treatment is very uncommon.

An association between anti-VEGF injections and stroke has been reported, although this has not been confirmed in large scale studies.

**Some common side effects that may occur include:**
- **Red eye** caused by a bleed on the white part of the eye where the injection was given affects around 10% of patients treated (1 in 10). This does not affect the vision and usually resolves within a week.
- **Sore and gritty eye,** slight ache and discomfort lasting a day or two. Lubrication drops from your local pharmacy will help to reduce this gritty sensation.
- **Blobs or small specks (floaters) in your vision** might be seen for a few days after the injection. There could also be flashing lights or swirls of light immediately after the injection.
Is there anyone who should not have this treatment?
You should not be given anti-VEGF injections if any of the following apply to you:
• an infection in either eye
• infection anywhere in your body
• currently taking antibiotics
• you are allergic to anti-VEGF or any of its ingredients
• you have recently been fitted with a pacemaker, and have not yet been reviewed by your cardiologist (heart doctor)

If any of the above apply, please let us know before your appointment, to avoid the possibility of your treatment being cancelled on the day.

Anti-VEGF should be used with caution in patients:
• who have had a heart attack or stroke in the last three months
• who have uncontrolled angina or uncontrolled high blood pressure
• in women who are trying to become pregnant, are already pregnant, or are breastfeeding

Please tell the person performing your injection if there have been any recent changes in your medical condition.

Pregnancy and breastfeeding
Anti-VEGF medicines should not be used during pregnancy. If you are pregnant or planning to become pregnant, discuss this with your doctor before your injection treatment.

If you do become pregnant whilst undergoing treatment please inform your doctor immediately.

Anti-VEGF medicines are not recommended during breastfeeding. Ask your doctor for advice before treatment.
Can other medicines affect anti-VEGF treatments?
Anti-VEGF and certain other medicines should not be taken at the same time, to avoid them reacting badly with each other. Some patients have developed a serious eye inflammation when receiving treatment with both anti-VEGF and verteporfin (Visudyne) photodynamic therapy (PDT). Tell the person performing your injection about all prescription and non-prescription medicines you take (including blood pressure medication, warfarin and aspirin), and if there has been any recent change.

Please continue to use your eye drops as normal following your injection.

Other information
You might notice some discomfort and redness for the first few days after your treatment, this is perfectly normal and is often due to the nature of the antiseptic used.

If your eye becomes progressively red, sensitive to light, swollen and painful, or your vision gets worse after the injection, contact eye casualty immediately on: 023 8120 6592. These symptoms can be a sign of an infection. Infections, if they do occur, usually develop between two and seven days of having treatment.

I intend to travel abroad, are there any special precautions?
We advise that you receive your injection no later than one week before you travel.

If you do intend to travel before this time, you should avoid getting water into your eye or swimming for 48 hours. If you experience any problems whilst you are away, please see a local ophthalmologist.

What should I do if I am worried after receiving my treatment?
If you have any questions or concerns, please feel free to speak to the person performing your injection before you leave.
If you have any concerns once back home, please contact:
Eye casualty: 023 8120 6592 (24-hours)

If you have a query about an appointment please contact:
Macular AMD team: 023 8120 8467
Diabetes team: 023 8120 6754

Further information
For further information about the medicine used in your treatment please see the Patient Information Leaflet (PIL) supplied, or ask the person performing your injection.

Southampton Eye Unit
University Hospital Southampton NHS Foundation Trust
Southampton General Hospital
Tremona Road
Southampton
SO16 6YD

Useful links
www.nhs.uk/Conditions/Macular-degeneration/Pages/Treatment.aspx
www.macularsociety.org/
www.rnib.org.uk/eye-health

If you need a translation of this document, an interpreter or a version in large print, Braille or on audiotape, please telephone 023 8120 4688 for help.