Photodynamic Therapy (PDT) for age-related eye conditions

Introduction
This leaflet gives you information about Photodynamic Therapy (PDT) for the age-related eye conditions macular degeneration and Central Serous Chorioretinopathy (CSCR). The aim of this leaflet is to explain what to expect at all stages of the treatment and to answer some of the questions you may have.

What is Age-related Macular Degeneration?
The macula is the centre part of the retina at the back of the eye. Many different conditions can damage the macula and lead to sight problems. Age-related Macular Degeneration (AMD) is a condition which occurs later in life.

There are 2 types of Age-related Macular Degeneration, usually known as ‘wet’ AMD and ‘dry’ AMD. PDT has been shown to be effective in treating a number of types of ‘wet’ AMD, in particular Choroidal Neovascular Membrane (CNV) and Polypoidal Choroidal Vasculopathy (PCV).

Wet AMD is caused by the development of abnormal blood vessels at the macula. These abnormal blood vessels cause fluid leakage, bleeding and scarring at the macula which can lead to sudden sight loss which cannot be cured.

What is Central Serous Chorioretinopathy (CSCR)?
CSCR is a condition where there is a build-up of fluid at the back of the eye, causing single or multiple areas of retinal detachment.

What is Photodynamic Therapy (PDT)?
PDT slows down or stops the development of abnormal blood vessels at the macula. The treatment aims to save the useful vision you have left, but you should not expect the treatment to improve it.
A light activated medicine called Visudyne® is used for PDT and is given by an injection into a vein in your arm. This medicine collects in the abnormal blood vessels in your eye, where it is activated using a gentle red laser light to treat your AMD. The aim is to close the abnormal blood vessels without harming other tissue at the back of the eye.

You may need up to 5 treatments over a period of 2 years.

PDT can sometimes be used for treating other conditions in the eye and can be used to treat other conditions in the body.

**Before treatment**

When you arrive at the Eye Clinic, your vision will be tested and drops put into your eyes to enlarge your pupils.

The drops will cause your sight to be blurred for a period of time so you must not drive to or from your appointment.

We may carry out some tests such as a repeat Fluorescein/Indocyanine Green Angiogram to help us assess your condition. Your eyes will also be examined by an eye specialist.

Your height and weight will be measured so that we know how much Visudyne® to use.

**During treatment**

A specially trained nurse will give you an injection of Visudyne® through a flexible tube (cannula) in your arm, which will take about 10 minutes. A nurse will stay with you while you have this treatment.

Anaesthetic drops will be put in your eye before laser treatment. A contact lens will be placed on your eye for the laser treatment which helps the laser light to be focused on the affected area at the back of your eye.

We will then carry out the laser treatment. This involves shining a special red laser light into your eye for 83 seconds. The laser treatment is not painful. Your vision is likely to be blurred for a few hours after treatment because of the dilating drops.
Possible rare side effects of PDT

The Visudyne® can leak out of the vein at the injection site which can cause pain, swelling, inflammation or bleeding.

About 2 in 100 of patients experience some back pain while the Visudyne® is being given, which can be helped by moving around (such as walking a few paces) until the pain wears off.

Some patients experience a temporary mild blurring of vision following treatment. You must not drive or use machinery until the blurring wears off.

Between 1 to 4 in 100 patients experience a severe, but usually temporary, decrease in vision in the treated eye following treatment.

Please tell the doctor before your treatment if you have experienced any of the following:

- If you have had a severe reaction to previous injections into a vein (intravenous)
- If you have a history of allergies
- If you have porphyria or severe liver disease

After treatment

PDT will cause your skin and eyes to become more sensitive to light.

**You must avoid direct sunlight and bright indoor lights for 48 hours after treatment.**

Ordinary indoor light is not harmful, but you should avoid **halogen lights**, including halogen light bulbs in the house and outside and car head lights. You should not have any surgery or dental work for 48 hours after treatment. Tanning salons should also be avoided for 48 hours after treatment.

If you are near a window, make sure that the curtains or blinds are closed, this includes skylights. Do not rely on UV sunscreens to protect against light sensitivity, they will not be effective. Wear protective clothing, hat and sunglasses.
Please bring (or wear) the following items with you to the Eye Clinic:

- Wide-brimmed hat
- Dark sun-glasses
- Clothing that will fully cover your arms and legs
- Socks and shoes.

**Follow up appointments**

You will have an appointment to check your progress around 1 to 2 months after PDT treatment. If needed, Fluorescein/Indocyanine Green Angiography and PDT will be repeated as before.

**Benefits of the procedure**

PDT can slow or stop the deterioration in your vision due to wet age-related macular degeneration.

There is some evidence that photodynamic therapy is a helpful treatment for central serous chorioretinopathy (CSCR).

As mentioned before, the aim of PDT treatment is to save the useful vision you have left, but you should not expect the treatment to improve it.

**Other procedures**

Several studies have shown that there is real benefit in having PDT treatment along with the current gold standard treatment for wet AMD (intravitreal anti-VEGF agents, for example Eylea ® and Lucentis®) in terms of getting rid of polyps, saving the vision you have left and reducing the need for ongoing treatment.

Please ask your consultant if you would like further information on studies about PDT and other treatments discussed in this leaflet.

If you decide not to have PDT treatment you will carry on with intravitreal Anti-VEGF agents as needed, and you will be given advice about how to make best use of the sight you have left.

If you have any questions about your treatment which has not been covered by this leaflet please ask a member of the medical or nursing team in the Eye Clinic.
Contact information

Eye Outpatient Clinic
Gloucestershire Royal Hospital
Tel: 0300 422 8358
Monday to Thursday, 9:00am to 5:30pm,
Friday, 9:00am to 1:00pm

Casualty Eyeline
Tel: 0300 422 3578

Calls are answered by a nurse between 9:00am and 5:30pm,
Monday to Thursday and 9:00am to 1:00pm on Fridays. At all
other times your call will be diverted to the operator who will
contact the on call eye doctor.

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