



PATIENT INFORMATION

RETINAL PHOTODYNAMIC THERAPY (PDT)

1. *What is Photodynamic therapy (PDT) and how does it work?*

- PDT is a form of laser treatment used in the Eye department to treat a variety of retinal disorders. It works by reducing the amount of leakage from abnormal blood vessels under the retina
- A light-sensitive dye called Visudyne, is injected into the bloodstream and is transported to the blood vessels in and under the retina at the back of the eye. The dye accumulates in the leaky blood vessels under the retina. A low energy or 'cold' laser beam is then directed at the source of leakage. This activates the dye and causes a reaction that seals the leaking blood vessels without damaging the healthy tissue around the affected area in the back of the eye. This reaction is completely pain-free and occurs over a number of days after treatment
- You will be reassessed a few months after the first treatment to determine if any further treatment is required as studies have shown that some patients require 2 or more treatments to reduce further leakage from the retinal vessels

2. *Who is eligible for treatment?*

PDT may be recommended in patients with

- Chronic Central Serous Retinopathy*: an eye disorder characterised blisters underneath the retina.
- Wet Age-related Macular Degeneration*-as an alternative to intravitreal injections or Argon Laser therapy
- Polypoidal Choroidal Vasculopathy*- a subset of age-related Macular degeneration
- Inflammatory Choroidal Neovascular Membrane*
- Myopic macular degeneration*
- Dome-shaped Maculopathy*

- Your ophthalmologist will inform you about your diagnosis and other treatment options available prior to starting treatment.
- Your ophthalmologist may need to write a letter to your GP or CCG requesting funding for your treatment. This is because there is no robust evidence in the literature to support a definite treatment advantage in the conditions listed above. Therefore CCGs may only approve funding if there is an Exceptional reason for why PDT should be provided for a particular patient.

3. *Can you still obtain treatment if funding is unavailable or if not approved by the CCG?*

YES,

- a. You could appeal the initial decision not to approve funding
 - b. Obtain treatment as a private patient in the private sector
- For further information, please discuss with your Ophthalmologist or GP as necessary

4. *What investigations do you require prior to PDT?*

- a) Fundus Fluorescein Angiography (FFA): a dye known as Fluorescein is injected into an arm vein, and photos are taken as the dye passes through the retinal blood vessels. During this test the defect in the layer beneath the retina can be identified, as leakage of dye is typically seen.
- b) Indocyanine Green Angiography (ICGA): This test is similar to an FFA, however a dye called Indocyanine green is used. This dye provides information about the blood supply beneath the retina and helps to identify the area to be targeted during PDT treatment.
- c) Optical Coherence Tomography (OCT): This is a photographic scan of the retina which documents the extent and monitors fluid distribution within and under the retina before and after treatment.

5. *What should you expect during the treatment process?*

Photodynamic therapy involves injecting a drug called Visudyne into your blood stream through a vein in your arm or hand. This can be given to any patient providing there is no history of

- o severe liver disease
- o Porphyria
- o uncontrolled high blood pressure
- o unstable angina
- o pregnancy or
- o allergy to photosensitive drugs

The drug is made from pork extracts and egg albumin. Let us know if you are a vegetarian, allergic to eggs or have any religious reasons for wanting to avoid pork or eggs.

Following the injection a cold laser beam will be applied to the retina. Apart from the discomfort of the initial injection, the whole treatment is painless and takes 10 – 15 minutes to complete.

6. *What are the possible side effects of photodynamic therapy?*

- A small number of patients have back pain and / or feel sick during the injection. These feelings subside once the injection is completed. Other side effects of this treatment include a transient decrease in vision for a few days and minor pain, discomfort and redness in the treated eye for a few hours. Rarely (less than 4 patients in 1000) visual loss can occur after treatment due to permanent blockage of the blood supply in the area treated.

Some patients get 1 or more of the following side effects: headaches, dizziness and a drop in blood pressure.

7. *What are the necessary precautions after PDT?*

- Visudyne will make you extremely light sensitive for up to 5 days after treatment. If you stay in bright light for too long, you can suffer a serious photosensitive reaction- like bad sunburn during the first 5 days. Therefore you are advised to wear dark glasses, a wide-brimmed hat, long-sleeved shirt/blouse and trousers and stay away from direct sunlight in order to protect your eyes and skin.
- You will have blurred vision for a few hours after treatment because of the dilating drops used to prepare your eye for treatment. During this time, you must not drive any vehicles or use sharp instruments, or operate machinery.
- If Visudyne leaks out of the blood vessel during the injection, you are likely to experience some pain where the injection is given. In this case, there may be a rash and the skin covering the leak will need to be covered for several days to protect it from sunlight.

8. *Follow-up arrangements:*

- Your ophthalmologist will need to see you within 6-8 weeks of the procedure.
- After treatment you will be given an appointment slip which should be handed to the receptionist before you leave the eye clinic.
- If you have not received an appointment within 4 weeks, please contact the Eye department secretaries on one of the telephone numbers listed below

9. Contact details:

- For medical enquiries during working hours, call the Eye clinic on 01803 655123
- For urgent medical enquires after working hours and at weekends 01803 655507
- For clinic appointments and other enquiries:
Consultant Ophthalmologist's secretary: 01803 655164
Consultant Ophthalmologist's secretary: 01803 6554825