Fundus Fluorescein Angiography
Indocyanine Green Angiography

Clinical Support Services

This booklet has been designed to give you some useful information, advice and to answer some commonly asked questions you may have.
Information for patients and visitors

Fundus Fluorescein Angiography
This is a diagnostic procedure, when a dye is injected into a vein in your arm or hand and sets of digital photographs are taken to display the blood vessels at the back of your eye. It shows any abnormal blood vessels and any leaking spots causing your eye problems.

Sometimes it is combined with Indocyanine Green Angiography (see Indocyanine Green Angiography below).

This information is essential for the eye Consultant to find the problem and plan your treatment.

You will be asked to sign a Consent form which confirms your agreement to undergo this procedure.

You will be asked if you have any allergies to any medicines, iodine or shellfish if this procedure is to be combined with Indocyanine Green Angiography).

It is carried out by experienced eye clinic medical / nursing staff and a medical photographer.

You are advised NOT to drive for the rest of the day after you have had this procedure and you may wish to bring a pair of sunglasses with you to protect your eyes from bright lights / sunlight afterwards.

The Type of Dye Used
Fluorescein – The risks involved:
This dye is a deep orange colour. It has been in use for many years. It has been proved safe to use in all patients.

Like all medicines, fluorescein dye can cause side effects but these are few in number.

The common side effects include nausea and vomiting. Skin rashes and itching are seen at times.

More serious side effects are spasm of the airway, anaphylactic shock and collapse. However, these risks are extremely rare.

After injection, the skin shows a temporary yellow discolouration. During this stage, you should avoid exposure to direct sunlight.

Indocyanine Green Angiography
This is a diagnostic procedure, when a dye is injected into a vein in your arm or hand and sets of digital photographs are taken to display blood vessels at the back of your eye. Sometimes this is combined with (see Fundus Fluorescein Angiography above).

It allows imaging of blood vessels in deeper layers than can be shown with Fundus Fluorescein Angiography alone.

This information is essential for the eye Consultant to find the problem and plan your treatment.

You will be asked to sign a Consent form which confirms your agreement to undergo this procedure.

You will be asked if you have any allergies to any medicines, iodine or shellfish as Indocyanine Green dye contains iodine.

It is carried out by experienced eye clinic medical / nursing staff and a medical photographer.

You are advised NOT to drive for the rest of the day after you have had this procedure and you may wish to bring a pair of sunglasses with you to protect your eyes from bright lights / sunlight afterwards.
Washing your skin will not remove the temporary discolouration.

If the dye leaks outside the vein it may cause temporary pain. This can be relieved by cold compression. If the injection site remains painful or causes you concern, please seek medical advice.

The dye is metabolised in the liver and excreted from your body via your kidneys. The urine remains orange-green in colour for 24 – 48 hours.

Indocyanine Green – The risks involved

The dye is a dark green powder which is mixed with a suitable liquid to form a dark green dye. It has been used in infants as well as adults patients for monitoring blood flow in the heart, liver and brain, as well as deeper layers at the back of the eye (choroid).

Like all medicines, Indocyanine Green dye can cause side effects although not everybody gets them.

The common side effects include nausea, feeling of warmth and flushing. Skin rashes (nettle rash) blotchy, itchy skin is seen at times.

Severe allergic reactions can include:

- Tightness in the throat
- Facial swelling
- A faster heart rate (palpitations)
- Tightness or pain in the chest
- A fall in blood pressure and breathlessness
- Collapse (cardiac arrest)

Severe allergic reactions are very rare and affect fewer than 1 in 10,000 patients.

After injection, the skin can show a temporary discolouration (Yellow if combined with Fundus Fluorescein Angiography)

During this stage, you should avoid exposure to direct sunlight. Washing your skin will not remove the temporary discolouration.

If the dye leaks outside the vein it may cause temporary pain. This can be relieved by cold compression. If the injection site remains painful or causes you concern, please seek medical advice.

The dye is metabolised in the liver and excreted from your body via your kidneys. The urine remains orange-green in colour for 24 – 48 hours.

Patients with Diabetes

Fluorescein dye gives a false high reading in the urine and on blood sugar tests. You should not adjust your insulin or any of your diabetic treatments based on these results during the first 2 days following the fluorescein angiogram. If you are concerned, please seek medical advice.

What will happen on the day of the procedure?

On arrival for your appointment you will have your vision tested and have dilating drops put into your eyes to enlarge the pupils.

This is to ensure the best photographs possible. It is important to take photographs of both eyes even if you only have a problem with one. You will have your blood pressure checked and be asked about any allergies, medications and medical conditions. You will then have a short wait whilst the eyedrops take effect (about 30 minutes), you will then be escorted to the photography room.
Photographic methods

You are seated in front of the camera with your chin and forehead resting firmly on the frame. It may be necessary for the nurse to keep your head in position.

The test is carried out in stages

A series of colour photographs are taken of the back of your eyes.

A tourniquet will be placed around your arm or wrist and your skin prepared for the procedure. A small tube (called a cannula) is inserted into a vein in your arm or hand and secured with a dressing. Saline will be injected through the cannula to check it is placed correctly in the vein.

The room lights will be turned off and dye(s) injected. Once the dye reaches the back of the eye, (this only takes a few seconds), the photographer will begin to take lots of pictures.

The lights from the camera flash are quite bright but it is very important to keep your eye open, a nurse will help you if necessary. You will then have a short rest.

Another series of photographs will then be taken a few minutes later. The cannula will then be removed and you will be asked to wait in the waiting area for about 15 minutes.

You will usually be given an appointment to discuss the results and plan your treatment with the eye doctor, although this sometimes possible on the same day as the test.

If you have not received an appointment within 7 days please contact the eye clinic where you had your photography for advice and help.

Advice after your procedure

You are advised to eat and drink as normal and to take any GP / hospital prescribed medications as normal unless you are told otherwise by the medical / nursing staff.

If you develop any problems over the next 24 hours, please contact the eye clinic where you had your photography.

Clinic hours:

Diana, Princess of Wales Hospital:
Monday – Friday between 8.30am – 5pm:
Phone Grimsby 01472 874111 ext 1155

Scunthorpe General Hospital:
Monday – Friday between 8.30am – 5pm:
Phone Scunthorpe 01724 282282 ext 2427

Goole and District Hospital:
Monday – Friday between 08.30 - 5pm:
Phone Goole 01724 290074

Evenings and weekends
Phone Goole 01724 290030

At other times please contact your own GP or the GP unit on:
Grimsby 01472 875575
Scunthorpe 01724 290444
Information for patients and visitors

Concerns and Queries
If you have any concerns / queries about any of the services offered by the Trust, in the first instance, please speak to the person providing your care.

For Diana, Princess of Wales Hospital
Alternatively you can contact the Patient Advice and Liaison Service (PALS) on (01472) 875403 or at the PALS office which is situated near the main entrance.

For Scunthorpe General Hospital
Alternatively you can contact the Patient Advice and Liaison Service (PALS) on (01724) 290132 or at the PALS office which situated on C Floor.

Alternatively you can email: nlg-tr.PALS@nhs.net

Confidentiality
Information on NHS patients is collected in a variety of ways and for a variety of reasons (e.g. providing care and treatment, managing and planning the NHS, training and educating staff, research etc).

Everyone working for the NHS has a legal duty to keep information about you confidential. Information will only ever be shared with people who have a genuine need for it (e.g. your GP or other professionals from whom you have been receiving care) or if the law requires it, for example, to notify a birth.

Please be assured however that anyone who receives information from us is also under a legal duty to keep it confidential.

Zero Tolerance - Violent, Threatening and Abusive Behaviour
The Trust and its staff are committed to providing high quality care to patients within the department. However, we wish to advise all patients / visitors that the following inappropriate behaviour will not be tolerated:

- Swearing
- Threatening / abusive behaviour
- Verbal / physical abuse

The Trust reserves the right to withdraw from treating patients whom are threatening / abusive / violent and ensuring the removal of those persons from the premises.

All acts of criminal violence and aggression will be notified to the Police immediately.

Risk Management Strategy
The Trust welcomes comments and suggestions from patients and visitors that could help to reduce risk.

Perhaps you have experienced something whilst in hospital, whilst attending as an outpatient or as a visitor and you felt at risk.

Please tell a member of staff on the ward or in the department you are attending / visiting.

Moving & Handling
The Trust operates a Minimal Lifting Policy, which in essence means patients are only ever lifted by nursing staff in an emergency situation.

Patients are always encouraged to help themselves as much as possible when mobilising, and if unable to do so, equipment may be used to assist in their safe transfer.

If you have any questions regarding moving and handling of patients within the Trust, please speak to a member of staff in the ward or department you are visiting.