



York Teaching Hospital  
NHS Foundation Trust

# Fluorescein and Indocyanine Angiogram

Information for patients, relatives and carers

① For more information, please contact:

**The Eye Clinic**

York Tel: 01904 726758

The York Hospital, Wigginton Road, York, YO31 8HE

Scarborough Tel: 01723 342055

Scarborough Hospital, Woodlands Drive,  
Scarborough, YO12 6QL

Caring with pride



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## Why do I need this test?

Your doctors have identified a potential problem with the back of your eye, either on your retina and/or choroid.

To gain a clearer understanding of your problem (or possibly to monitor your response to treatment), your doctors have suggested an angiogram to help with their decision-making.

## What does this test involve

### **Fluorescein and Indocyanine Green (ICG)**

Angiograms are diagnostic tests used to investigate the blood vessels of the eye. In the case of a fluorescein angiogram - an orange/yellow dye called fluorescein is injected into a vein in your hand or arm, the dye travels around your body, and a series of photographs are taken as the dye circulates through the blood vessels at the back of the eye (retina and choroid). In most cases, a fluorescein angiogram is sufficient but your doctor may have requested a further angiogram using Indocyanine green. This is a similar process but uses a green dye to examine the blood vessels of the eye.

This test will give your Doctors more information about the back of your eye and will help to decide what treatment, if any, is required.

## What do I need to do before I attend?

For the Indocyanine green angiogram only: If you are diabetic **and** take Metformin then your eye doctor should have spoken to you about stopping this drug for three days before and three days after the ICG angiogram. If they have not spoken to you about this then please telephone 01904 726758 or 01723 342055 so that one of our doctors can give you further instructions.

If you are having a fluorescein angiogram and you have been asked to have any blood tests by your doctor to test for thyroid function or vitamin D levels, please wait for 48 hours after having your fluorescein angiogram to have these tests as the fluorescein may affect the blood test results.

Before the procedure, you will be asked to sign a consent form (reference FYCON123-3 Fluorescein or Indocyanine Green angiogram). You sign to confirm that you agree to the procedure and understand the information given to you. The form will be kept in your Patient Notes and you will also be given a copy for your own records.

## What do I need to bring with me?

Please bring the glasses you use for watching television or for driving (distance glasses / varifocals / bifocals / sunglasses).

## Can I drive myself to the appointment?

No - The nurses will have to put some drops in both of your eyes to dilate your pupils. This will cause **temporary blurring for between four to six hours** and probably make you unsafe for driving until they have worn off.

## What happens to me on the day?

On arrival into the eye clinic, the nurse will:

1. Check your vision with your glasses on.
2. Check your blood pressure.
3. Put dilating drops into both your eyes. These drops sting for a few moments and dilate the pupils.
4. Explain the procedure to you.
5. Insert a small plastic tube into a vein in your arm.  
**This will stay in for the duration of the procedure.**

6. The photographer will take some standard photographs of both your eyes. There is a bright flash at the time of taking the photographs.
7. The nurse will then inject the dye into the tube in your arm and, as the dye circulates round the blood vessels of your body the photographer will take a sequence of photos.

If you are having a Fluorescein angiogram and an Indocyanine Green angiogram at the same time then the Indocyanine Green will be injected first and photographs taken, then the orange Fluorescein dye will be injected and further photographs taken.

8. There will then be a two to three minute break and another sequence of photos followed by another five-minute break and then some final shots of the back of your eye (possibly 30 minutes after the first injection).
9. The nurse will then remove the tube from your arm, recheck your blood pressure and if you are feeling well you may go home or onto your next appointment if you have one.

## **Potential side effects**

### **Common side effects (more than 1 in 100 patients)**

- Some patients feel slightly sick as the dye goes through the blood stream. This sensation usually passes within 30 seconds (happens in two to three patients per 100).
- The dye may colour your urine (two to three patients per 100) (bright orange for Fluorescein or green for Indocyanine Green). Fluorescein may cause your skin to have a yellow tinge. These effects can last approximately 24-48 hours.
- Some patients feel faint – this usually passes without any long term problems.

### **Rare Side Effects (less than 1 in 100 but more than 1 in 1000)**

- Mild Allergic reactions - including a rash (urticaria) and less commonly a moderate allergy causing breathing difficulties or swelling of the throat.

### **Extremely rare side effects (rarer than 1 in 1000)**

- Allergic reactions (severe) - Approximately 1 in every 200,000 patients (for Fluorescein) or approximately 1 in every 40,000 patients (for Indocyanine Green) having this investigation may have a life threatening side effect and even die. Medicines are on hand in our clinic to treat such an eventuality.



## **Food and drink**

You may eat and drink as normal both before and after this procedure.

## **How long will I be in clinic**

The procedure itself does not take long, around 15-30 minutes, but with preparation for the test please arrange to be in clinic for at least 60 to 90 minutes. It can take time to dilate the pupils adequately enough to get good photos. The Indocyanine Green Angiogram takes longer than the Fluorescein Angiogram.

If you have a follow up appointment (and possible treatment) on the same day, you may be in the hospital between one to five hours.

## **When do I get my results**

If you do not have an appointment the same day as your angiogram, your photos will be screened by the Consultant and an additional appointment sent out in the post to you.

If you do not hear within a week please ring 01904 726758 or 01723 342055.

## **Tell us what you think of this leaflet**

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact:

Mr Ashok Vyas, Consultant Ophthalmologist, Eye Clinic, Scarborough Hospital, Woodlands Drive, Scarborough, YO12 6QL or telephone 01723 712269.

## **Teaching, training and research**

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

## **Patient Advice and Liaison Service (PALS)**

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email [pals@york.nhs.uk](mailto:pals@york.nhs.uk).

An answer phone is available out of hours.



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**01904 725566**

email: [access@york.nhs.uk](mailto:access@york.nhs.uk)



Braille



Audio e.g.  
CD



Large print



Electronic

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