Indocyanine Green Angiography

What is Indocyanine Green Angiography?

Indocyanine Green (ICG) Angiography is an eye test that uses a special dye and photography to look at blood flow in a layer of the walls of your eyeballs called the choroid. It is used to help the doctor decide on the best form of treatment for your eye condition.

This test may be done in combination with another test called a Fluorescein Angiogram. You will be advised if you also need this test; there is separate information leaflet for Fluorescein Angiography.

Why do I need an Indocyanine Green Angiogram?

Your eye specialists have asked for you to have an Indocyanine Green Angiogram because it is possible that you have an eye condition involving the choroid layer of the walls of your eyeballs. The choroid is a deeper layer in the wall of the eyeball, that cannot be seen with the naked eye. This layer is made up mostly of blood vessels. The information that this test provides will be used to confirm or refute a diagnosis for you, and to plan your treatment if any is needed.

Problems in the choroid are often related to inflammation in the eye, which can occur solely in the eye or be related to other problems in other parts of the body.

What does the test involve?

Eye drops that make the pupils dilate will be given. These take 20 to 30 minutes to take effect. These eye drops cause temporary blurring of your vision, so you are advised not to drive to your appointment. You will be required to sign a consent form before your test commences.

A small tube called a cannula will be placed in to one of your veins, usually in your arm or hand by a specially trained nurse. In a darkened room, you will be asked to place your chin on the camera's chin rest and your forehead against a support bar to keep your head still during the test.

Other formats

If you need this information in another format such as audio CD, Braille, large print, high contrast, British Sign Language or translated into another language, please contact the PALS desk on 01271 314090 or at rduh.pals-northern@nhs.net.
The photographer will take pictures of the retina inside your eye. After the first group of pictures are taken, a dye called indocyanine green is injected into the chosen vein through the cannula by your nurse. Then, a series of pictures are taken as the dye moves through the blood vessels in the back of your eye.

No x-rays or radioactive materials are used for this test.

**How long will it take?**

The dilating eye drops take approximately 30 minutes and the procedure takes approximately a further 30 minutes. The photographer will take a rapid series of photographs every few seconds on the eye of most interest. At 5-minute intervals, further photographs will be taken of both eyes.

**Where is it done?**

The test is carried out in the Exmoor Unit on Level 2 of the North Devon District Hospital in Barnstaple.

**What preparations are needed?**

Please bring a list of your usual medications to this appointment.

You must not drive or operate machinery until your vision has returned to normal. This may take several hours following your Indocyanine Green (ICG) angiography due to the dilating eye drops.

**How will I feel during the test?**

Having the cannula tube placed in your vein will be a little uncomfortable. Once the cannula tube is in, you should not feel very much else. The dye may cause a very mild sensation in your arm or hand as it is injected. Saline will be injected through the cannula tube just after the tube is placed in your vein and just after the dye is given; your hand or arm will feel slightly cool as the saline goes in.

As the photos are taken, the camera will flash. You may find this to be a bit dazzling.

**How will I feel afterwards?**

Your colour vision may take a few minutes to settle back to normal when you are back in normal room light.

**What happens after the test?**

If you have not had any side effects from the dye by the time the test is finished, the nurse will remove the cannula tube from your vein and you will be able to go home.

Please remember, you will not be able to drive until your dilating eye drops have worn off.
Are there any risks?

Side effects from this test are very rare, but it can happen. You might:

- Have a sensation of warmth during the injection.
- Feel slightly sick.
- Notice your heart beating faster.
- Feel itchy and/or notice a mild rash.

Serious allergic reaction (called anaphylaxis) is reported as happening very rarely, at less than 1 indocyanine angiogram in every 10,000. All the necessary support is available in the very unlikely event that this happens.

Follow up

Test date: ............................................................

The photographs from your indocyanine green angiogram today will be examined within a week after your test. You will either have an appointment with a doctor to be told the results or will be contacted about the results and what needs to happen next.

If you have not been contacted about your results after two weeks, please contact:

Anne (Optometry Bookings Officer) on 01271 311714. If you are greeted by a voicemail facility, please leave a message including your name, date of birth and a contact telephone number, and say that you are enquiring about an angiogram result.

Further information

If you have questions that you would like answered before your test appointment, please contact:

Andrew Phillipson (Ophthalmic Nurse Practitioner) on 01271 322467.

References

A Summary of Product Characteristics for Verdye 5 mg/ml Injection was supplied by Jess Miller (Renal Pharmacist-Royal Devon and Exeter Hospital)

PALS

The Patient Advice and Liaison Service (PALS) ensures that the NHS listens to patients, relatives, carers and friends, answers questions and resolves concerns as quickly as possible. If you have a query or concern call 01271 314090 or email rduh.pals-northern@nhs.net. You can also visit the PALS and Information Centre in person at North Devon District Hospital, Barnstaple.
Have your say

Royal Devon University Healthcare NHS Foundation Trust aims to provide high quality services. However, please tell us when something could be improved. If you have a comment or compliment about a service or treatment, please raise your comments with a member of staff or the PALS team in the first instance.

Tell us about your experience of our services. Share your feedback on the Care Opinion website www.careopinion.org.uk.