Fluorescein (FFA) and indocyanine green (ICG) angiography

Fluorescein (FFA) and indocyanine green (ICG) angiography are simple diagnostic tests, which involve the injection of fluorescein (yellow) dye and/or indocyanine green into your bloodstream via a vein in your hand or arm, followed by a series of photographs taken over several minutes.

The FFA test gives your doctor more information about the condition of your retina in the back of your eye.

The ICG test provides information about the choroid which lies underneath the retina.

These tests help the doctor to consider the best treatment options for you. Please take your medication as normal on the day of your procedure. You may eat and drink as normal.

What does the test involve?

1. On arrival at the outpatient department your vision will be tested.

2. You will be asked about your general health. Please tell us if you have any breathing or heart problems, are pregnant or on renal dialysis, or have photosensitive epilepsy. It is also very important to inform us of any allergies particularly to fluorescein, iodine or iodide, medications, sulpha drugs or latex. We will use FFA or ICG cautiously in patients that are allergic to shellfish or seafood.

3. Your pupils will then be dilated with eye drops; these drops might blur your vision, particularly near vision, for five to six hours. It is therefore advisable not to drive home after your appointment.

4. You will have the procedure explained to you and you will be asked to sign a consent form to agree to the procedure. Please feel free to ask any questions.
5. Once your pupils are dilated, you will be taken into the imaging room.

6. You will be seated at a camera with your arm supported, and some (flash) photos will be taken.

7. A cannula (small plastic tube) will be inserted into a vein in the back of your hand.

8. The fluorescein dye and/or indocyanine green will be injected into your arm. A series of flash photos are taken, whilst the dye enters the retinal or choroidal vessels at the back of your eye.

9. The whole test only takes about 10 to 30 minutes. Please expect to be in the department for one to two hours so that we can do the necessary pre and post test checks.

10. It is very important to keep your eye in the position requested by the photographer.

Are there any side effects?
- The fluorescein dye will give your skin a yellow tinge and your urine will be bright yellow for one or two days. The ICG procedure does not affect the colour of your skin or urine.

- You might experience a hot flush sensation as the dye is injected.

- One in 10 patients might feel nauseous or short of breath, or develop a transient rash, but this rarely lasts for more than a few seconds.

- In rare instances, flash photography may trigger an episode of epilepsy or tonic-clonic seizure.

- There is a very remote risk of a severe allergic reaction to these intravenous drugs. For this reason, doctors and staff trained in Intermediate Life Support (ILS) are always available on site and trained in the management of anaphylaxis.

After the fluorescein and/or indocyanine green angiogram:
The cannula will be left in your hand for 30 minutes. Once we are certain that you have not suffered any adverse reactions, the cannula will be removed.

The doctor will discuss the results with you and make recommendations for any treatment you might need.

If you have any concerns following the procedure please contact Moorfields A&E on: 020 7566 2080/82/83.

Author: Eilis Kennedy and Niaz Islam
Revision number: 4
Approval date: January 2018
Review date: January 2020

Moorfields Eye Hospital NHS Foundation Trust
City Road, London EC1V 2PD
Phone: 020 7253 3411
www.moorfields.nhs.uk

Moorfields Direct telephone helpline
Phone: 020 7566 2345
Monday-Friday, 8.30am-9pm
Saturday, 9am-5pm
Information and advice on eye conditions and treatments from experienced ophthalmic-trained nurses.

Patient advice and liaison service (PALS)
Phone: 020 7566 2324/ 020 7566 2325
Email: moorfields.pals@nhs.net
Moorfields’ PALS team provides confidential advice and support to help you with any concerns you may have about the care we provide, guiding you through the different services available at Moorfields. The PALS team can also advise you on how to make a complaint.

Your right to treatment within 18 weeks
Under the NHS constitution, all patients have the right to begin consultant-led treatment within 18 weeks of being referred by their GP. Moorfields is committed to fulfilling this right, but if you feel that we have failed to do so, please contact our patient advice and liaison service (PALS) who will be able to advise you further (see above). For more information about your rights under the NHS constitution, visit www.nhs.uk/choiceinthenhs