

Patient information

Retinal Angiography (FA/ ICG)

St Paul's Eye Department – Royal Liverpool Hospital

Your Consultant / Doctor has advised you to have imaging of your eyes: either a fluorescein angiogram (FA) or an indocyanine green angiogram (ICG) or both.

What are FA and ICG?

These are tests that provide information about the back of the eyes including the retina and the choroid, particularly the blood vessels and circulation. These tests use dyes called fluorescein and indocyanine green, which are injected into your blood stream and highlight the eye's blood vessels as they pass through them.

What are the benefits of having FA and/ or ICG?

These tests help to diagnose retinal conditions, evaluate and monitor them and in addition, assist clinicians in planning the best form of treatment. It may also be necessary to repeat the test during or after a course of treatment to assess response.

How are the tests performed?

You will have eye drops to make your pupils larger. A cannula (small tube) will be inserted into a vein in your forearm or the back of your hand for the purpose of injecting the dye. Within 10-15 seconds the dye travels to the blood vessels in your eye.

A retinal camera is used to photograph the back of the eye. The entire test lasts about 10-15 minutes (FA) or about 20-40 minutes (ICG).

Following the test, we ask you to stay in the unit for about 30 minutes to make sure that you do not have any side effects and that you are all right to go home. A nurse will remove the cannula before you leave the eye department.

What are the risks/ side-effects of having these tests?

Some patients experience bruising at the injection site - this should resolve within a couple of days.

You may experience a short period of nausea (1 in 10 people do) and rarely, vomiting, after the injection. This passes very quickly.

You may develop a rash or itching, during the test (1 in 200). Severe allergic reactions compromising your breathing or blood circulation are extremely rare (1 in 25,000), and it is ensured that immediate treatment is available in such an event.

It is generally considered a safe procedure in most patients.

Fluorescein dye is yellow and will give your skin a yellow tinge (similar to jaundice) for a few hours following the injection. It will make your urine bright yellow for a day or two as your body gets rid of the dye. This is nothing to worry about.

ICG is best avoided during pregnancy. There is not enough information available regarding how safe FA is in pregnancy, although generally it is believed to be of low risk.

There is no other alternative dye test available as a substitute in these circumstances, but information gathered from eye examination and a non-invasive scan of the retina (OCT) can help plan treatment.

What will happen if I decide not to have these tests?

It may be difficult to plan further treatment or management of your eye condition without the additional information which these tests provide.

If you are worried about any of these risks, please speak to your Consultant or a member of their team.

If you are on dialysis for your kidneys, or pregnant or lactating, please let your doctor know.

Getting ready for the tests

It is not necessary to starve for these tests. Eat and drink normally and take your prescribed medicines as usual on the day.

Getting back home

You will not be able to drive for four to six hours after the test as your pupils will be dilated which will leave your vision slightly blurred. You may want to make alternate arrangements to get back home. It may be useful to bring a pair of sun glasses to avoid glare. There are no other restrictions on any of your daily activities or regarding getting back to work.

Further appointments

You will be given the results of the test(s) either at the same clinic visit or at your next visit, by the doctor. Please make sure that you know when your next outpatient appointment is before leaving the department.

Feedback

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

Further information

**Any problems or queries, contact
St. Paul's Clinical Eye Research Centre
Monday to Friday 8.30 am to 6.00 pm
Tel: 0151 706 3994
Text phone number: 18001 0151 706 3994**

**After 6 pm or weekend:
St. Paul's Primary Care Clinic (via switchboard)
Tel: 0151 706 2000
Text phone number: 18001 0151 706 2000**

External information

**US National Library of Medicine
<http://www.nlm.nih.gov/medlineplus>**

**Author: St Paul's Eye Department
Review date: April 2026**

All Trust approved information is available on request in alternative formats, including other languages, easy read, large print, audio, Braille, moon and electronically.

يمكن توفير جميع المعلومات المتعلقة بالمرضى الموافق عليهم من قبل انتمان المستشفى عند الطلب بصيغ أخرى، بما في ذلك لغات أخرى وبطرق تسهل قراءتها وبالحروف الطباعة الكبيرة وبالصوت وبطريقة برايل للمكفوفين وبطريقة مون والإلكترونياً.

所有經信托基金批准的患者資訊均可以其它格式提供，包括其它語言、易讀閱讀軟件、大字體、音頻、盲文、穆恩體 (Moon) 盲文和電子格式，敬請索取。

در صورت تمایل می‌توانید کلیه اطلاعات تصویب شده توسط اتحادیه در رابطه با بیماران را به اشکال مختلف در دسترس داشته باشید، از جمله به زبانهای دیگر، به زبان ساده، چاپ درشت، صوت، خط مخصوص کوران، مون و بصورت روی خطی موجود است.

زانیاری پیومندیدار بهو نه‌خوشانه‌ی له‌لایمن تراسته‌وه پسه‌ند کراون، نه‌گمر داوا بکریت له فورماته‌کانی تردا بریتی له زمانه‌کانی تر، نیزی رید (هاسان خویندنه‌وه)، چاپی گهوره، شریتی ده‌نگ، هیلی موون و نه‌لیکترۆنیکی همیه.

所有经信托基金批准的患者信息均可以其它格式提供，包括其它语言、易读阅读软件、大字体、音频、盲文、穆恩体 (Moon) 盲文和电子格式，敬请索取。

Dhammaan warbixinta bukaanleyda ee Ururka ee la oggol yahay waxaa marka la codsado lagu heli karaa nuskhado kale, sida luqado kale, akhris fudud, far waaweyn, dhegeysi, farta braille ee dadka indhaha la', Moon iyo nidaam eletaroonig ah.