

Electro-retinogram (ERG)

What is an ERG examination?

This is a test of the responsiveness of the retina which is part of the eye. It is used to determine how healthy the retina is. The test takes upto 90 minutes to complete and your results will be sent to the referring GP/clinician and are usually available within seven days.

How is the test performed?

A very fine thread is placed between the lower eyelid and the eyeball. The thread is placed quickly and you may feel a little discomfort for a few seconds but this will not last. Leads will also be placed on your face at the side of your eyes and one lead on your forehead. Once the leads are in place you will be asked to sit in the dark for 20 minutes. This is to allow certain cells in your retina to be at their most active. You will then be asked to look at some flashing lights at different intensities. This is followed by sitting in the light for 10 minutes then being shown some more flashing lights. You may be asked to look at a screen with a chequerboard pattern.

It may be necessary to modify the test procedure for a small number of patients including young children/babies. The fine thread maybe replaced by a small disc on the skin, near to the eye. The physiologist will discuss this with you before the test if it is required.

At the start of the test you MAY be given some eye drops (Tropicamide 0.5% and Proxymetacaine 0.5%) to anaesthetise and dilate your pupils (the black part of your eye).

The eye drops will sting for a few moments but then will settle down. The effect of the eye drops can last for between 4-6 hours. This means that when you leave the department after the test, your pupils will still be dilated. You may find it uncomfortable in daylight/bright light and your eyesight may be blurry. You must not drive following the administration of eye drops until your eyes have returned to normal, which can take up to 6 hours. If you attend in a vehicle please ensure there is someone you can contact who is able to drive you home. PLEASE BRING SUNGLASSES WITH YOU.

If you think you may be pregnant, please let the member of staff who is doing your test know. Eye drops will not be used if you are pregnant, but the test can still be done.

How do I prepare for the test?

If you are taking any medication please continue to take it and bring a list of your medication with you. You may continue to eat meals as normal.

Please inform the physiologist at the START of your test if you have been diagnosed with epilepsy.

