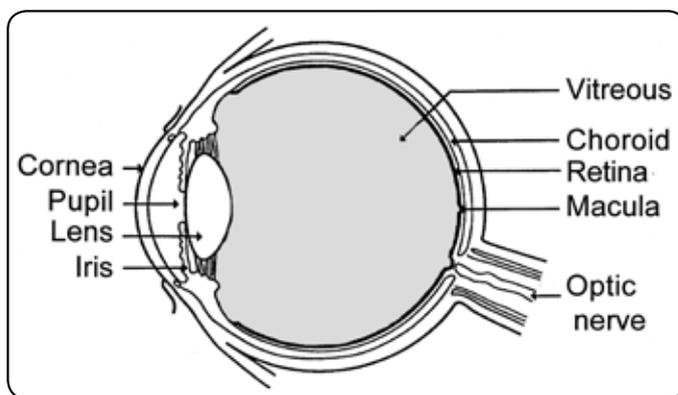


Electrodiagnostic Eye Tests

Electrodiagnostic eye tests

The Clinical Physiologist carries out special tests, which may help your doctor decide what is causing your eye problems. These tests give information about the retina at the back of the eye and about the optic nerves (see diagram below). The tests do not cause discomfort, there are no injections and they are very simple to carry out.



There are four main tests, which are described below, but usually we need to carry out only one or two tests on each patient. We decide which test is required according to your symptoms. For each test we place small recording electrodes on the skin of the face, against the lower eyelid or at the back of the head. These tests allow us to record very small responses from the eye or optic nerve.

Please feel free to ask questions about the test at any time.

A report will be sent to your own doctor, who will explain the results of the test at your next visit.

If you wear glasses please bring them with you.

Tests of the retina (ERG test)

- This test takes about an hour and gives us important information about how well the retina responds to flashes of light.
- A small thread of silver will be placed along the lower eyelid – touching the eye, this does not cause any discomfort and you will see normally during and after the test.
- The light will be turned off for 20 minutes to accustom your eyes to low light levels.
- During the test procedure all you have to do is look carefully at a series of lights that flash on a screen in front of you. We measure the reaction of the eye by means of the silver thread recording electrode.
- In two other tests called a PERG and a multifocal ERG you will sit in front of a computer screen whilst we measure the retinal response to moving patterns.

Tests of eye movements (EOG test)

- This test takes 45 minutes. It is very simple and does not cause discomfort.
- During the test you will be asked to make a series of careful eye movements in which you focus alternately on two small red lights.
- A series of measurements are made, both in the dark and in the light.

Test of the optic nerves (VEP test)

- This test takes about 45 minutes. The test helps us determine whether the optic nerves are working normally.

- All you have to do is to look carefully at patterns presented on a computer screen in front of you. You do not have to make a response of any kind – we simply use our recording discs to measure the response of the optic nerve to these patterns.

Tests of young children and babies

Some young children and babies do not appear to see normally or they do not move their eyes normally. It may be important at an early stage to check that the retina at the back of the eye is normal. This can be done by a procedure specially developed for the very young.

- We will place small sticky recording tabs on the skin just below each eye and on the forehead
- These allow us to measure the response of the eye to brief flashes of different coloured lights from a small hand held lamp.
- The test can be done quite quickly, we do not need to use eye drops and it does not cause discomfort.

The Trust cannot accept any responsibility for the accuracy of the information given if the leaflet is not used by RD&E staff undertaking procedures at the RD&E hospitals.

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