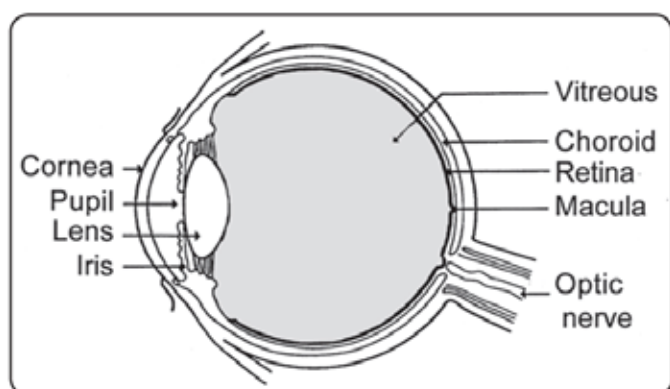


Electrodiagnostic Eye Tests

Electrodiagnostic eye tests (vEDTs)

vEDTs are diagnostic tests which record the natural electrical responses from the eye or optic nerve. They give information about the retina at the back of the eye and about the optic nerves (see diagram below), and help your doctor decide what is causing your eye problems.



How do I prepare for the test?

- Please ensure you have clean, dry hair and do not apply any hair spray, oil, mousse or creams. This is because hair products and even the hair's natural oils, can make it difficult for us to get a good recording.
- Medicines should be taken as usual, and eat meals as normal. Medicine and meals can be taken as usual.

- Please bring a list of any medicines that you are currently taking.
- If you wear glasses please bring them with you.

What happens during the test?

The vEDTs are performed by a qualified or trainee Healthcare Scientist and take between 45 mins and 1.5 hours depending of the number of tests needed. Trainees are supervised by a qualified member of staff, the amount of supervision varies, depending on the amount of experience the trainee has. We will ask your permission if a trainee is performing the test.

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, small discs (electrodes) are placed on the skin of the face, against the lower eyelid or at the back of the head. This can feel a little scratchy.

The electrodes are connected by wires to a computer which records the electrical responses.

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

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.

Side-effects

The tests do not cause discomfort, there are no injections and they are very simple to carry out.

There are no lasting effects and you may resume your normal activities immediately after these tests.

If you are allergic or sensitive to cosmetics, lotions or sticky tape, please tell the Healthcare Scientist before the test starts.

It is safe for you to have the vEDTs if you are pregnant, however please let the Healthcare Scientist know, as they may alter the test slightly.

If you have any questions or concerns about the test please ring the **Neurophysiology Department** on **01392 402458**.

We welcome feedback about our service. Please tell a member of staff if you felt this service is good or otherwise.

When will I get the results?

After completing the examination, the results will be analysed and a report will be sent to the doctor who referred you. This may take up to 4 weeks.

What are the consequences of not having vEDTs?

The vEDTs are a well-established method of helping doctors to diagnose and treat a wide range of eye conditions. Your doctor would not have as complete a picture as required and hence your diagnosis may take longer and/or your treatment may not be the most appropriate.

Contacting Us

Staff in the department will be happy to answer any query you may have and will do their best to ensure your comfort.

Please let us know if you are unable to attend your appointment by ringing the telephone number below.

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

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