



York and Scarborough
Teaching Hospitals
NHS Foundation Trust

Information about your VEP and ERG appointments

(Visual Evoked Potential and Electro-
Retinogram)

Information for patients, relatives and carers

① For more information, please contact:

Department of Clinical Neurophysiology

Tel: 01904 725665

Department of Neurosciences

The York Hospital, Wigginton Road, York, YO31 8HE

This leaflet aims to answer any queries you may have regarding your VEP and ERG appointment.

What is Visual Evoked Potential (VEP)?

- A VEP tests the nerve pathway (the optic nerve) from the eyes to the brain.
- Just before the test you will be asked to read an eye chart to check your eyesight.
- A few small disks with wires called recording electrodes are attached to your scalp using a special adhesive paste.
- You are then asked to focus on the centre of a TV monitor which has a moving pattern of black and white squares on it (a bit like a chess board). We may also show you a white flashing light.
- The electrical signals produced naturally by your brain are recorded while you look at the black and white squares on the monitor and/or a flashing light. The responses are recorded onto a machine in the form of a graph.

What is Electro-Retinogram (ERG)?

ERGs test the light sensitive cells of the retina. There are two types of ERG tests.

These tests involve attaching a couple of recording electrodes by the side of your eyes using a special paste and micropore tape. A fine thread like contact is placed along your lower eyelid so that it rests against your eye. Most people tolerate the thread contact well. Once the fine thread contact is in place you will not be able to see it and it does not affect your ability to see.

Pattern ERG;

You are again asked to focus on the black and white square pattern on the monitor while a recording of the response is made.

Full Field ERG;

For this part of the test it is necessary to put drops in your eyes to dilate your pupils (make them large) as well as some anaesthetic drops to numb the surface of your eye.

The lights will be turned off and you will sit in the darkened room for 20 minutes after which you will be shown some flashes of light. The main lights will then be turned on and once your eyes have adapted to the light you will be shown more flashing and flickering lights.

Preparation for the tests

1. Please allow about one and half to two hours for these tests; they are done one after the other.
2. If you normally wear contact lenses please remove them and wear your glasses instead. It is important you bring all of your spectacles with you.
3. Your hair needs to be clean. Do not apply any hair products, for example gel, spray, or mousse.
4. There is **no** need to stop taking any medication unless you have been told to do so by your doctor. Please bring a list of your medications with you.
5. We would advise you to bring a pair of sunglasses with you as the drops can make your eyes more sensitive to light.
6. Please tell us if you have ever had an allergic reaction to any eye drops.
7. Please let us know if you have ever suffered from an allergic skin reaction to sticky plaster or micropore.
8. If you wear makeup this should be removed from around your eyes and forehead before you attend for the tests.

Important: the dilation drops can blur your vision so you will **unable to drive yourself home.**

What happens once the test is finished?

When the test is finished, the disks and fine thread will be removed. Most of the paste will be removed; small traces may remain and will come out with washing.

We do these tests one after the other. These tests take about one and half to two hours after which you will be free to leave.

The results are analysed and interpreted by the consultant clinical neurophysiologist. A written report will be sent to the doctor who referred you for the test. The physiologist will not be able to tell you the results of the test.

Are there any risks

The eye drops we use can cause eye **stinging**, temporary blurred vision or sensitivity to light. If any of these effects persist or worsen, you should contact your GP promptly.

What should I do if I cannot attend this appointment?

- If you are unable to attend, please let us know as soon as possible so that the appointment can be offered to another patient.
- A new appointment can be arranged for you at a mutually convenient date/time.
- If you no longer require this test, please let us know so that we can remove your name from the waiting list.

If you have any queries or concerns regarding the test, then please contact the department.

Please contact us on telephone number 01904 725665
Department opening times are:
Monday - Friday 8:30am– 4:00pm

For more information, visit our website:
www.yorkhospitals.nhs.uk

Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact:
Joanne Horrocks, Department of Clinical Neurophysiology,
The York Hospital, Wigginton Road, York, YO31 8HE or
telephone 01904 725667.

Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email pals@york.nhs.uk.

An answer phone is available out of hours.

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