

Recording nerve and brain activity with a visual evoked potential (VEP) and pattern electroretinogram (PERG) (adults)

Clinical Neurophysiology

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Information for Patients

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Your consultant has asked us to do a visual evoked potential (VEP). This sheet tells you what a VEP and PERG are and what you need to know before you come for the appointment.

What is a VEP and PERG?

An evoked potential (EP) is a recording of the electrical activity from different sensory nerve pathways to the brain.

- A visual evoked potential (VEP) records electrical activity from the part of the brain responsible for vision.
- A pattern electroretinogram (PERG) records the electrical activity from the retina.

A trained professional in healthcare science (physiologist) will carry out the VEP and PERG.

What do I need to do before the VEP and PERG?

- Please bring a list of current medication and take these as normal
- You may eat and drink as normal
- If you wear glasses or contact lenses, please bring them with you

How long does the VEP last?

Preparation and recording will take around 1.5 hours

What will happen during the VEP and PERG?

- The physiologist will measure your head and make some small marks on the scalp with a wax type crayon.

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- They will then prepare the skin at these marks with a gritty gel.
- They will apply recording electrodes to the scalp with a sticky paste. The recording electrodes are small metal discs.
- The physiologist will stay in the room during the test.
- They will ask questions about your medical history.
- You will be asked to look at a moving black and white chequered board on a screen. There may also be some flashing lights.
- Responses from the part of the brain responsible for vision will be recorded on the computer and one eye will be tested at a time.
- A VEP is **not** painful and there are no after-effects.
- The physiologist will then decide if further testing using a PERG is required and if so, a very fine recording electrode will be placed in your lower eyelids.
- You will then be asked to look at a moving black and white checkerboard, much like the VEP and both eyes will be tested at the same time. This does not take long to do.

At the end of the VEP and PERG the electrodes will be removed. Any remaining sticky paste will be removed when you next wash the hair. This will **not** hurt.

When will I get the results?

You will not get the results on the day of the VEP/PERG. Your consultant will be sent a report which they will then discuss with you.

Anything else I need to know?

Please let us know if you will be arriving by ambulance, we may need to rearrange the appointment.

Contact details

If you need more information before the appointment, call **0116 258 5621**.

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