

**Department of Clinical Neurophysiology
The National Hospital for Neurology and Neurosurgery**
Queen Square, London, WC1N 3BG
Tel: (020) 344 84752 Fax: (020) 7713 7743
Email: cnp@uclh.nhs.uk Web: www.ucl.ac.uk/cnp

Visual Evoked Potentials (VEPs)

This leaflet is designed to give you some information about the investigation for which you have been referred. Your doctor may have already explained what a VEP involves, but you will probably still have some questions.

If after reading this leaflet you have any fears, queries or concerns, please do not hesitate to contact our staff before your appointment. You will also have the opportunity to discuss any of these issues on the day of the appointment prior to the start of the investigation.

WHAT IS A VEP?

A VEP is a routine investigation performed on all age groups of patients, from babies to the elderly. It records the electrical response of the brain to visual stimulation. The responses are detected using small disposable discs that are loosely attached to the scalp. These investigations are usually carried out to diagnose disorders of the eye or the brain.

ON THE DAY OF THE INVESTIGATION

Please be on time and report to the reception. If you usually wear contact lenses or spectacles for distance you will need to bring them with you and wear them during the investigation.

THE PROCEDURE OF THE INVESTIGATION

The investigation is painless and will be carried out by a clinical physiologist and will take approximately 30 minutes. We shall explain every step of the procedure as it progresses. Please let us know, if you are uncomfortable or require a rest during the investigation.

We shall place two small discs onto your head and one disc on each ear lobe. These discs are held in place with a sticky, water-soluble paste that can be easily removed after the investigation. For the detection of good responses, the skin first has to be rubbed with some gritty paste. During this part of the procedure the clinical physiologist may ask you questions about your symptoms and medical history.



Please inform the clinical physiologist, if you have any allergies to latex or plaster tape before the procedure.

You will then be seated in an armchair in front of a television screen. An eye patch will cover one of your eyes and you will be asked to concentrate in the middle of a check pattern whilst the room will be in darkness. It is very important that you do not lose concentration and focus on the check pattern.



Sometimes it will be necessary to perform an additional investigation called PERG (**P**attern **E**lectro-**R**etino-**G**ram). This test records the activity of the retina, the light sensitive part of the eye, in response to visual stimulation. The clinical physiologist will place a little thread on top of the lower eyelids. This will not harm the eyes but you may find it a little uncomfortable. The electrodes are only used once and therefore do not transmit infections. Then you will be asked to concentrate in the middle of a check pattern for a few minutes as for the VEP.



AFTER THE INVESTIGATION

When the investigation is complete, the discs are removed. VEPs or PERGs do not have any persistent side effects. You will be able to return to your normal activities immediately after the investigation although there may be some small amount of paste left in your hair, which will wash away with shampoo.

RESULTS OF THE INVESTIGATION

The results of the test will be sent to the referring consultant within a couple of days as the recorded traces need to be analysed by a physician. It is generally best that the results of the neurophysiological investigation are discussed with your consultant, because the interpretation may depend on the results of other tests.