

## Neurophysiology Department

# Visual Evoked Potential (VEP) and Pattern Electroretinogram (PERG) test

### What is a VEP test?

The visual evoked potential (VEP) test investigates how well visual signals are passed from your eye to your brain.

When you look at an object, an image of that object is projected onto the retina at the back of the eye. The retina converts this image into tiny electrical signals, which pass along the optic nerve to the brain, where the sensation of “seeing” is generated. The VEP measures these signals.

### How is it done?

A Clinical physiologist will start by checking your visual acuity by asking you to read letters from a board. They will then take some measurements of your head and apply small metal discs using a sticky paste. One eye will be tested at a time, and you will be asked to fixate on a dot in the centre of a screen. A checkerboard pattern will move around this dot. This produces signals in the brain which we can record.

It is important to stay relaxed during the test and to keep focused on the dot in the middle of the screen.



### **Pattern Electroretinogram (PERG)**

The Pattern Electroretinogram (PERG) measures the function of the central retina (the macula), which you use for detailed vision, such as reading. You will be asked to look at a moving checkerboard pattern on a screen whilst we record the small electrical signals generated in the retina. This is done by placing a thin thread along the lower eyelid, which may feel a bit uncomfortable.

Very rarely, the front of the eye (cornea) may be scratched, causing irritation and watering of the eye after the test is finished. If this happens, you should visit your family doctor.

### **Why have you been referred for this test?**

Your doctor has asked us to perform these tests to check how well your visual system is working. This will help the doctor diagnose and treat your condition. It can also help determine disease progression or the effects of treatment.

### **Is there anything you should do before the test?**

Please avoid using hair gel or hairspray, as this might affect the signals we record. Try to get a good night's sleep before the test, as we need you alert and fully awake.

### **Do you need to bring anything?**

It is very important that you bring your glasses with you (both reading and distance) and list of any medication that you are currently taking. If you wear contact lenses, please remove them before the test and bring or wear your glasses. You may also want to bring a brush and a hat to cover your hair after the test.

### **Are there any risks or aftereffects?**

If you have epilepsy, there is a very small, theoretical risk that the tests could cause a seizure. If you have epilepsy, please inform the doctor or Clinical Physiologist at the start of the test.

## Patient Information

There are no side effects from the tests. However, you may want to ask someone to drive you to and from the Hospital, as you may feel tired after the test.

### Where is it done?

On the day of your appointment, please come to the Neurophysiology Department on the 4<sup>th</sup> floor (opposite Ward 42) for your test. Be sure to be performed. Please bring your appointment letter with you.

### When will you get the results?

You will not get any results on the day of your appointment. The Consultant Neurophysiologist must review the results in detail and then a written report will be sent to the referring doctor. Your results will be discussed with you during a follow-up appointment with your referring doctor.

The Trust has access to interpreting and translation services. If you need this information in another language or format, please contact 0800 252 060 and we will do our best to meet your needs.

The Trust operates a smoke free policy.

### Did we get it right?

We would like you to tell us what you think about our services. This helps us make further improvements and recognise members of staff who provide a good service.

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