

Patient information factsheet

Evoked potentials (EPs)

An evoked potential is a procedure used to determine how well the nerves in the brain and spinal cord are working. It can involve one or more of a series of small tests, depending on what your doctor has requested.

You have been sent an appointment for your test and we have provided the following information so you know how to prepare and what to expect.

Before attending your appointment

Please make sure you:

- continue to take your regular medication
- eat and drink as normal
- arrive with your hair freshly washed and dried, and free from hairspray, mousse or gel to ensure the electrodes stick to your scalp
- wear loose fitting clothing
- bring your glasses and/or contact lenses with you, if you wear them

Make sure you tell us before your appointment if you have:

- a cardiac pacemaker
- a defibrillator
- another implanted device

You can contact us by telephone on: **023 8120 6785**

Please ensure you arrive on time and allow at least one and a half hours for the procedure. If you arrive late it may be necessary to rebook your appointment.

During the procedure

Your test will be performed by a specialist called a physiologist. Your head will first be measured and sites marked with a wax crayon. A cream will then be applied to the scalp with a cotton bud.

Responses are recorded from the brain by placing several small electrodes onto your scalp using a sticky paste. The paste is washed away at the end of the procedure. You may wish to bring a comb or hairbrush with you. You may also need to have additional small sticky electrodes placed on the arms, legs, shoulders or neck. The physiologist will tell you if you need to have these. These are also washed away at the end of the procedure.

The most commonly performed evoked potentials involve stimulating the visual and hearing pathways, as well as a nerve in the leg or arm.

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In order to stimulate the visual system you will be required to watch a checkerboard television screen. To stimulate the hearing pathways you will be asked to listen to some clicks through headphones and to stimulate a nerve in the leg or arm a tiny electrical pulse is applied to the ankle or wrist.

We may also ask you for your consent to perform an additional test called a pattern electroretinogram (PERG). In this test we will place a fine, thread-like electrode between your lower eyelid and conjunctiva (the clear membrane covering the white of your eye). We will then ask you to concentrate again on a checkerboard television screen.

Risks and side effects

Evoked potentials are safe tests without any significant risks or side effects. You won't feel any sensation or stimulation from the electrodes on your scalp or from the other recording equipment. If you need to have the tiny electrical stimulus, this will feel similar to sharp pins and needles.

A PERG test is also a safe, painless test. You may find it slightly uncomfortable when we first place the electrode between your lower eyelid and conjunctiva. This sensation usually fades after a few minutes. If you continue to experience persistent eye irritation after having a PERG test, please ask your GP for advice.

After the procedure

The physiologist performing your test will not be able to give you your results immediately after it is completed as the results need to be analysed by one of our consultants. The consultant will then send a report to your doctor.

Further information

Please feel free to contact the department if there is any information you do not understand. If your appointment is not convenient please phone as soon as possible to rearrange it.

Clinical neurophysiology department

Telephone: **023 8120 6785** (between 8am and 4.30pm, or please leave a message on the answer machine).

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