

Department of Clinical Neurophysiology

Evoked Potential Investigation

Introduction

This leaflet has been produced to provide you with information about your Evoked Potential (EP) investigation and aims to answer any questions that you may have. Please do not hesitate to ask a member of staff if you have any further questions or concerns.

What is an EP?

EP stands for evoked potential. These are recordings of the electrical activity produced by your brain and nervous system in response to stimulation of the eyes, ears, hands or feet.

We have been asked to do this test by your consultant.

How do I prepare for the EP?

- Your head will need to be clean and free from any hair products/hair pieces/weaves.
- You should have your meals and medication as normal.
- If you wear glasses for reading or watching TV, please bring them with you.
- You will need to wear loose fitting clothes that enable you to roll the sleeves up to the elbow and the trousers above the knee.
- Please remove all bracelets, wristwatches and rings (if possible) before the test.
- Your hands and feet need to be warm for the EP so if it is cold weather, please wear gloves and thick socks.
- Do not apply any skin lotions/moisturisers on the day of the test.
- If you have a latex allergy please inform the department the day before your appointment.

- Please contact the department prior to your appointment if you have a defibrillating pacemaker.

What will happen during the EP?

A physiologist will perform your test.

- You will be asked to sit or lie on a bed and you will feel your head being rubbed in a number of places. This will not hurt.
- A number of small discs with long wires will then be applied to your head, back of neck, shoulders and/or ears with a sticky paste. These wires are then connected to a computer, which will record your EP.
- During the test you will:
 - Be asked to look at the centre of a TV screen that has a moving black and white chequer board pattern. Each eye will be tested separately, with a patch covering the eye not being tested. This does not hurt.
 - Feel small electrical pulses (rather like pins and needles) in your hands that will make your thumb twitch slightly. This is an unusual sensation that sometimes can be uncomfortable but should not be painful. Each hand is tested separately.
 - Feel small electrical pulses (rather like pins and needles) in your feet that will make your toes twitch slightly. This is an unusual sensation that sometimes can be uncomfortable but should not be painful. Each leg is tested separately.
 - Be asked to wear headphones to listen to a clicking sound in your ears. Each ear will be tested separately.

The EP can take between 20-60 minutes to perform (usually 50minutes).

What are the risks of an EP?

A small number of patients have allergic skin reactions. If you are sensitive to cosmetics, lotions or sticky tape please inform the clinical physiologist performing your test.

There are no risks to pregnant ladies or their unborn babies.

What will happen after the EP?

The discs will be taken off and the majority of the paste will be removed from your hair. You are advised to shampoo your hair when you return home to remove all traces. There are no after effects from this test and you will be able to return home or go to work.

When will I know the results of my EP?

The results of the investigation need to be analysed afterwards. A report is prepared for your consultant, who should receive it in approximately two weeks. You will not get any results on the day.

Any further questions?

If after reading this leaflet you would like more information, or are still unsure about anything to do with the test, please do not hesitate to contact us at the Clinical Neurophysiology Department and speak to one of our clinical physiologists. They will be happy to help you.

Telephone: 0191 2824578 (Direct Line) between 9-5pm

Information Produced by Clinical Neurophysiology Staff