

Evoked Potentials

What are Evoked Potentials (EPs)?

Evoked potentials record the electrical signals produced by your brain after stimulation. We can record up to three types of EPs depending on what the referring Consultant has asked for; these can be visual, auditory or somatosensory.

Each test can take up to 45 minutes. A Clinical Physiologist starts by making measurements of your head and making temporary marks with a skin pen. After gently rubbing over the marks, the Clinical Physiologist attaches small metal discs using sticky paste or tape.

In order to facilitate the procedure;

- Please ensure that your hair is clean and free from grease, hairspray and lacquers, etc
- Loose fitting clothing is worn
- Jewellery may be worn, however should be easily removable if it gets in the way

After the test, the discs are removed and any paste left in the hair can be washed out with shampoo. There are no after effects and when the test is finished you will be able to return home or to work/school.

What are Visual Evoked Potentials (VEPs)?

These are tests of the contacts between the eyes and the back of the brain. You will be asked to look at the centre of a television screen that has a moving black and white chequer board pattern.

Each eye is tested separately, with a patch covering the eye not being tested. This is a painless test and there are no after effects. When the test is finished you will be able to return home or to work/school.

If you wear glasses please bring them along for this test.

What are Somatosensory Evoked Potentials (SSEPs)?

These are tests of the contacts from the arm or leg through the spinal cord to the brain. An electrical stimulator is used to pass brief electrical currents to your nerves. This causes an unusual pricking sensation and there may be small, uncontrollable twitches of your hands and feet. This can be uncomfortable but should not be painful. There are no after effects with this test.

If you have an implanted electrical device, please contact the department directly on 0121 371 6420 (Monday – Friday 08:30 – 16:30) with details of the device so that the appropriate action can be taken.

What are Brainstem Auditory Evoked Potentials (BAEPs)?

These test the contact from the ears to the brain. A pair of headphones is used to give a clicking sound to one ear at a time and a continuous noise to the other ear. This is a painless test and there are no after effects.

Results

The results of your test(s) will need to be looked at by one of our doctors who will then send a full report of the test results to the doctor who referred you.

Department address and contact information:

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If you require this information in another format, such as a different language, large print, braille or audio version please ask a member of staff or email patientexperience@uhb.nhs.uk.