

Before your EP investigation

- Wash your hair the night before; the test works best on clean, dry hair, free from styling products.
- Meals and drinks can be taken as usual.
- Medication should be continued as usual, unless your doctor has advised otherwise.
- Remember to bring along your glasses.

After your EP investigation

- The discs will be removed along with the majority of the paste. Any remaining paste will need to be washed out at home.

Results

The EP data needs careful analysis and a report will be prepared for your hospital doctor. This is usually done within 7-10 working days.

Any questions?

If you have any concerns, please do not hesitate to contact the Neurophysiology Department.

Tel: 0191 5699086

Useful websites

www.nhs.uk
www.chsft.nhs.uk

This information was correct at the time of printing. While the Trust makes every reasonable effort to keep its information leaflets up to date, very recent changes may not yet be reflected in the guidance and you should discuss this with the clinical staff at the time of your appointment.

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EVOKED POTENTIALS (EP)

PATIENT INFORMATION LEAFLET

Neurophysiology

Sunderland Royal Hospital

Evoked Potentials (EP) investigation

Evoked potentials are small electrical signals produced by the nerves, spinal cord and brain in response to a particular type of stimulation (sight, sound or touch). Different types of stimulation can give information about how well each area is functioning. Several areas of the body may need to be examined even if your symptoms occur in only one place.

What happens during the EP?

Depending upon which parts of the nervous system need to be tested, small disc electrodes are applied to your scalp, neck and possibly behind your ears, using a soft paste.

You will sit in a chair or lie on a couch during testing and will be encouraged to relax as much as possible.

The investigation will be tailored to your doctor's specific request. This may include:

1. Visual Evoked Potentials (VEPs)

Prior to the test, a brief assessment will be made of your vision. **If you wear reading or distance glasses, please bring these along.** You will be asked to concentrate on the centre of a TV screen covered with black and white squares, which flash back and forth for a few minutes.

2. Somatosensory Evoked Potentials (SSEPs)

Mild electrical pulses are used to stimulate nerves in your wrist, ankle or knee which often causes rhythmical twitching in your hand or foot. This will stop when the stimulus is switched off.

3. Brainstem Auditory Evoked Potentials (BAEPs)

You will listen to clicking and rushing sounds through ear-phones for a few minutes.

During stimulation you will be asked to remain relaxed, still and quiet whilst responses are recorded.

How long will the test take?

Each part of the test takes a different length of time; if you only need VEPs this may take 30-45 minutes. However, if you need all 3 types of test, this can take up to 90 minutes.

Suitable clothing

It is advisable to wear loose fitting clothing. However, you may be asked to undress to allow access to specific areas. If possible, avoid tights so that ankles can be easily accessed if necessary. Also, an open-collared top or shirt allows easy access to your neck for electrode application.

Risks associated with EPs

The electrical impulses used in SSEPs are sometimes a little uncomfortable. Most people say they feel a tingling or pulsing sensation. However, there are no significant side effects.

Skin sensitivity

On rare occasions, some people may experience a skin reaction to the paste or preparation gel used to attach the disc electrodes. If you have a skin condition, or are concerned that you may be particularly sensitive, please contact the department before your appointment to discuss this.

Chaperone

There may be times when you would feel more comfortable with a chaperone in the room during your investigation. If this is the case please do not hesitate to ask, a member of staff will be happy to arrange this.