

Patient Information

Neurophysiology

Somatosensory evoked potentials (SSEP) information sheet

What is an SSEP test?

An SSEP test is done to investigate how well the signals from the nerves in your arms and legs travel through your spinal cord to your brain.

During the test, electrodes are placed on different areas of your skin such as on your shoulders, legs, spine, and scalp. Small electrical pulses are then delivered to your wrist and ankle, and as these travel along your nerves, they are sensed by the electrodes. Arms, legs, or both are tested individually. The test usually takes about 1.5 to 2 hours to complete but can take up to 3 hours, depending on the problem.

Why have I been referred for this test?

Your doctor has asked us to do a SSEP test. This could be because of weakness, numbness, or sensory symptoms in your arms, legs, or body. The information gained from the test will provide your doctor with further information. This will help them in diagnosing and treating your problem.

How is the test done?

- You will be taken to the clinical room in the Neurophysiology Department by a clinical physiologist (CP).
- The CP will start by explaining the procedure. They will ask for some medical information regarding your referral.
- Some measurements are made of your head to find the correct position



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to place the electrodes. Additional electrodes are placed on the back of your neck, down your spine, arms, and legs. The CP will rub your skin and scalp using an abrasive gel. Then they will place the electrodes on your head. A special cream is used for this which will hold the electrodes in place.

- You will then be asked to move to the bed and lay in a comfortable position. You should try to stay relaxed as possible, as this will provide the best results from the test and make the test quicker.
- An electrical stimulator will be placed on your wrist or ankle. An electrical current is then delivered through the electrical stimulator. This will feel like a pulsing sensation. The current will get stronger until a twitching movement is observed in your hand or feet.
- After the test, the electrodes will be removed, and any residual paste will be cleaned from your hair. You will need to wash your hairs once you return home.

Is there anything I should do before the test?

If you have a pacemaker or spinal cord stimulator, please ring up **024 7696 5121** before you attend your appointment and let us know at the time of appointment.

- Make sure that you wear loose clothing. Wear clothes that can be rolled up above your knees.
- Please be aware that if we are testing your legs, you will be asked to take off your shoes, socks, tights, or stockings. It may be necessary to apply electrodes on your waist/hip/thigh area, so please make sure your clothing allows easy access.
- Please avoid wearing jewellery to your appointment.
- Please avoid using any body lotion, fragrances, or hair gel as this might interrupt the signals. Please take a shower or bath to remove any oils from your skin.
- Please check your hair for head lice and treat it before you attend if it is found. The test will not be done if head lice are present.

Do I need to bring anything with me?

- Bring a list of any medication you are taking. Continue to take your regular medication as normal.

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- You may want to bring a brush or comb and a hat if you want to cover your hair after the test has finished.

Are there any after effects?

- The SSEP testing procedure is usually painless. The electrical impulses are usually very small. This can be a little unpleasant but should not cause too much discomfort. You will only feel this at the time of testing.
- Usually there are no after effects from this test, and you should be able to leave once recording is completed.
- You may experience some minor skin irritation from the electrodes. You may want someone to drive you to and from the hospital as you may be tired after the test.

Where is it done?

- On the day of your appointment, please come to the University Hospital Coventry, Neurophysiology Department on the 4th floor (opposite ward 42) for your test to be performed. Please bring your appointment letter with you.

When will I get the results?

- You will not get any results on the day of your appointment. The consultant neurophysiologist will review the results in detail and then a written report will be sent to the referring doctor. The referring doctor will give you your results at a follow-up appointment.

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

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