

Medication

Medication should be taken as usual, unless your doctor has advised otherwise. If you have an appointment for an extended EMG, there may be advice about medication in your appointment letter.

If you are taking blood-thinning medication such as Warfarin, you should tell the Doctor/Physiologist before the test starts.

Results

The NCS/EMG 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. Our direct telephone number is 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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City Hospitals Sunderland

NERVE CONDUCTION STUDIES (NCS) & ELECTROMYOGRAPHY (EMG)

PATIENT INFORMATION LEAFLET

Neurophysiology Department

Sunderland Royal Hospital

What are Nerve Conduction Studies?

This test examines how well your nerves are functioning and can identify if you have a trapped or otherwise damaged nerve.

What does the test involve?

Small gelled stickers are applied to the skin in order to record responses from your nerves / muscles and a brief electrical pulse is used to stimulate the relevant nerves. The responses are measured to determine whether your nerves are functioning normally.

What is EMG?

EMG stands for **electromyography**. This examines how well your muscles and associated nerves are functioning. Part of the test involves nerve conduction studies, as described above. If muscles need to be examined, this is done using a fine needle. Several areas of the body may need to be examined even if your symptoms occur in only one place.

Will I feel anything?

The investigation is sometimes a little uncomfortable, however the sensation is usually brief, and there are no significant side effects.

For NCS, most people say they feel a tingling or pulsing sensation. For EMG, although a sharp scratch is felt as the needle is inserted the majority of patients do not consider the test to be unduly uncomfortable.

Risks associated with NCS:

There are no reported risks.

Risks associated with EMG:

The muscles tested may feel sore for a short time after the examination. The needle may cause a small amount of bleeding and there is a small chance of localised bruising.

How long will the test take?

- If you require nerve conduction studies only, the test can take up to 45 minutes.
- If you require electromyography, the test can take up to 1 hour.
- If you require extended / complex electromyography, the test can take up to 2 hours.

Your appointment letter will inform you which type of test you have been allocated.

What to do before attending for the test:

- **If you have a cardiac pacemaker, please contact the department on 0191 5699086.**
- Avoid using body lotion / cream for 24 hours before your appointment as this may prevent the gelled stickers from adhering to the skin.

- On the day of the test, keep as comfortably warm as possible; if you tend to have cold hands or feet we would suggest wearing gloves and thick socks (body temperature can affect your test results).
- Avoid wearing large amounts of jewellery. This allows better access to the nerves/muscles being examined. We can work around jewellery that cannot be removed e.g. wedding rings.

During the test:

It is advisable to wear loose fitting clothing, however you may be asked to undress to allow access to specific nerves or muscles.

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, the member of staff will be happy to arrange this.