Your Consultant would like you to have a NCS/EMG investigation.

What are NCS and EMG?

**NCS** stands for Nerve Conduction Studies. It is a test used to find out how the nerves in your arms and/or legs are working.

**EMG** stands for Electromyography. It is a test that records the electrical activity that is naturally produced in your muscles.

These tests are used to investigate a number of different muscle and nerve problems. Recording this information will assist your Consultant in their diagnosis and management of your medical complaint or condition.

A Consultant physiologist or a clinical physiologist will perform the test and a healthcare assistant may also be present. Staff in training may be present during your investigation, this will be explained at the time of your appointment and consent for this will be discussed with you.

What should I do before the test?

Please avoid using moisturiser for 12 hours prior to the test.

Wear loose fitting clothing to allow the limbs being tested to be accessed easily.

Continue taking medication as normal, unless you have been instructed otherwise by your doctor and bring along a list of current medication with you.

If you are taking blood thinning medication such as Warfarin, Apixaban (Eliquis), Rivaroxaban (Xarelto) or Dabigatran (Pradaxa) you should tell the doctor/clinical physiologist before the test starts.

*IF YOU ARE ON WARFARIN, YOU WILL NEED TO ARRANGE TO HAVE YOUR INR CHECKED 1-2 DAYS BEFORE THE TEST AND BRING THE RESULTS WITH YOU.*

If you have a pacemaker/ implanted device or cardiac defibrillator fitted, please telephone the department on receiving this information leaflet.

You are welcome to bring a friend or relative to accompany you to your appointment.
**What do the tests involve?**

The Doctor or Clinical Physiologist performing the test will fully explain and obtain your consent for the procedure. They will answer any questions you may have and obtain a clinical history from you.

**NCS:** A number of sticky electrodes are placed on the hands or feet. Your arms/legs may need to be warmed prior to the test to get them to the correct temperature.

To test the nerve a small electrical pulse is given to the skin, and a measurement taken. This is repeated at 2 or 3 points along the arm or leg.

This pulse can make the muscles jump slightly and will cause an unusual tingling or pulsing sensation. This should not be painful but may cause mild discomfort.

**This test will last approximately 30 minutes**

You will have NCS and then depending on the results you may also have EMG.

**EMG:** A fine needle is inserted into a muscle. Recordings are taken with the muscle relaxed and when the muscle is tensed. This takes a few minutes for each muscle.

A sharp scratch will be felt as the needle is inserted which may feel a little uncomfortable.

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

**This test will last approximately 20-30 minutes**

If you require both NCS and EMG the test may take up to 1 hour.

After both tests you will be able to continue your daily activities as normal, including driving. These tests are not a treatment but will help the doctor to understand the reasons for your symptoms.

Some bruising may occur after your EMG but if you are concerned about any changes please contact your GP.
If you are unable to attend this appointment, have any specific requirements or questions please ring 0151 556 3416 as soon as possible.

Patient co-operation is required for the duration of the test; if due to learning disabilities you feel more time is needed for the appointment please contact the department on: 0151 556 3416

In addition, we can also provide a visit around the department in advance of the appointment, for patients who may require further support.

We welcome feedback about our services. Following the test we would be grateful if you would take a Patient Satisfaction Survey away with you to fill in and send back to us freepost.

Further information about NCS and EMG is available from numerous organisations including:
1. The Brain Charity, Norton Street, Liverpool L3 8LR, 0151 298 2999 or visit www.thebraincharity.org.uk
This information can be translated on request or if preferred an interpreter can be arranged for additional information regarding these services please contact the Patient Experience Team on 0151 556 3090