

INFORMATION FOR PATIENTS HAVING ELECTROMYOGRAPHY (EMG) AND NERVE CONDUCTION STUDIES (NCS)

This leaflet is designed to give you some information about the investigation for which you have been referred. Your doctor should have explained what an EMG involves, but you may still have some questions.

The term EMG (Electromyography) is often used by clinicians to refer to both Nerve Conduction Studies (NCS) and EMG. Depending on the problem being investigated, you may require one or both of the procedures described below.

Before the investigation:

It is essential that you inform us as soon as possible (please telephone) if you:

1. **Have a cardiac pacemaker** (especially if it is the type that can deliver shocks to restart your heart – an Implanted Cardiac Defibrillator) or any other implanted device for which you have had batteries inserted under your skin. Please bring any details you have about your pacemaker with you.

2. **Are taking Warfarin** or another tablet to thin your blood for which you have to attend for blood test monitoring (aspirin is not a problem). The doctor will need to see your latest INR result (bring your booklet with the results and test dates if possible).

Additionally:

It is helpful if you wear a short sleeved top for the examination as this will reduce the need for undressing. If your legs need to be examined loose fitting trousers (which can be rolled up above the knee) or a skirt are advisable and you will be asked to take off your shoes and socks/tights/stockings. If the weather is cold it is helpful if your hands are kept warm by wearing gloves.

Please do not use moisturisers or skin lotion on the day of the investigation as this may interfere with the study. You will also need to remove any rings, watches or bracelets before your appointment.

Please bring a list of your current medication with you.

The test procedure:

Most patients will need **Nerve Conduction Studies (NCS)** which involve using small electric pulses to stimulate the nerves in the arms and/or legs so that nerve or muscle responses can be recorded and measured. Some patients may find this uncomfortable.

Some patients will also need **Electromyography (EMG)** which involves putting a very fine electrode like an acupuncture needle into selected muscles to look for signs of a disorder of the muscles, or their nerve supply.

All electrodes are disposable. Each electrode is only ever used on one patient, and cannot transmit infection from another person to you.

Depending on the nature of the problem being investigated, the clinician performing the study will decide how many nerves and muscles need to be examined. Usually the decision as to whether further nerves and muscles need to be looked at depends on what is found as the investigation proceeds.

Duration.

Depending on the complexity of the problem, the study may take anywhere from 20-45 minutes.

After the study.

Nerve Conduction Studies do not have any side effects. After Electromyography the muscles into which the needle has been placed may ache a little for a few minutes. There may be the occasional small bruise. If there is any persistent pain or swelling you should inform your GP.

Results.

The results of the investigation will be sent to the referring doctor or consultant. The doctor performing the study may be able to give you preliminary results, but it is usually not appropriate for him/her to discuss the findings with you in any detail because the interpretation may depend on the results of other tests.

If you have any queries or concerns, please do not hesitate to contact us before your appointment:

**DEPARTMENT OF CLINICAL NEUROPHYSIOLOGY
Colney Lane, Norwich, NR4 7UY
Tel: 01603 287306 (Monday - Friday 8.30am-4.30pm)**