

INFORMATION FOR NERVE CONDUCTION STUDIES(NCS)/ ELECTROMYOGRAM (EMG)

About the Test

Nerve conduction studies (NCS) measure how quickly a nerve is working. Pads are placed on the skin surface and the nerve is stimulated. If the nerve is trapped, damaged or diseased then these signals will be slow. An additional test, an electromyogram (EMG) may be performed on some patients to test how well the muscles are working.

How to Prepare

On a cold day, could you please make sure that you wear gloves. Your hands should be warm for this examination. Nerves conduct messages more slowly when cooled so this could affect the results of your test.

Please avoid using any form of oils or creams on the hands and wear loose clothing that allows access to elbows and knees.

Please remove your watch and do not wear an excessive amount of rings/jewellery as they may have to be removed for the test.

Wear loose comfortable clothing. We need access to your elbows and knees.

During the test

To obtain measurements of your nerve impulses a recording electrode will be placed onto your skin, usually on your upper and/or lower limbs. Another electrode will be used to stimulate the nerve.

The stimulator produces small electrical pulses which feel like a sharp tapping sensation. The process will be repeated for a number of different nerves.

Although the test can be uncomfortable, and some people experience a slight increase in their usual symptoms for a few minutes after, the test will not cause you any harm.

If an EMG is required, a fine needle will be inserted into the muscle to view and listen to the electrical activity. You may be asked to move in a certain way in order to contract the muscle.

The small size of the needle means that it should not be too uncomfortable. As with all needles, however, you may experience some minor bruising and soreness for a short time after the test.

After the test

There are no after effects from either test.

The specialist physiologist performing your test may not be able to give you a result immediately after the test is completed. The results need to be analysed and a full medical report will be sent to your doctor. This usually takes about two weeks.