

# Nerve Conduction Studies and EMG

## At St Peter's Hospital, Chertsey



We can provide interpreters for a variety of languages, information in larger print or other formats (e.g. audio) - please call us on 01932 723553.

To use the Text Relay service, prefix all numbers with 18001.

اگر نیاز به ترجمہ دارید، لطفاً با شماره 01932 723553 تماس بگیرید۔

ने उगाठुं उरुमे दी लेउ वै उं खरुथु करवे इस नंघर उे बेन करे: 01932 723553

اگر آپ اس کا اردو زبان میں ترجمہ چاہتے ہیں، تو براہ کرم اس فون نمبر 01932 723553 پر رابطہ کریں

Se precisa de uma tradução por favor contacte: 01932 723553

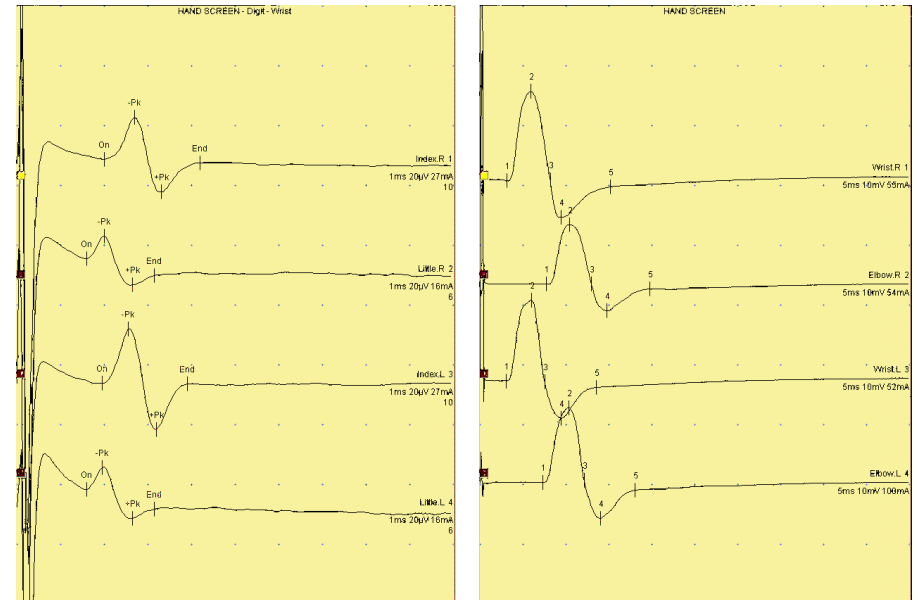
আপনার অনুবাদের দরকার হলে এখানে যোগাযোগ করুন : 01932 723553

यदि आपको अनुवाद की ज़रूरत है तो कृपया इस नंबर पर फोन करें: 01932 723553

Jeżeli chcemy, aby te informacje w innym języku, proszę zadzwonić 01932 723553

**St. Peter's Hospital**  
Guildford Road  
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KT16 0PZ.  
Tel: **01932 872000**

Website: [www.ashfordstpeters.nhs.uk/clinical-neurophysiology](http://www.ashfordstpeters.nhs.uk/clinical-neurophysiology)



**Patient Information**

# Having Nerve Conduction Studies and EMG

## An introduction for all patients

### What are NCS and EMG?

Nerve conduction studies (NCS) are recordings made of the electrical activity from nerves and muscles in response to stimulation.

EMG stands for Electromyogram, a recording of the electrical signals produced naturally by muscles.

These two kinds of study may be used together or separately, and we often just call them EMG. They give information about nerves, muscles and the connections between them. The information may be useful to your doctor in many different types of condition. Your doctor may have to combine this information with other types of information to make a diagnosis.

### About our Department

West Surrey Clinical Neurophysiology is a specialist department, one of only a few in the country. We are based at **St Peter's Hospital in Chertsey** but we provide our services to patients from several other hospitals too.

**Please make sure you come to the right hospital!**

### Contacting us

If you have any questions before your appointment please contact us and we will try our best to answer them.

You can phone us on **01932 722543**. We are open from 9am to about 5 pm. There is an answering machine outside these hours or if we are unable to take your call.

Our postal address is:

West Surrey Clinical Neurophysiology  
St Peter's Hospital  
Guildford Road  
Chertsey  
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### Further Information

We aim to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with our staff or Manager on duty.

If they cannot resolve your concern, please contact our Patient Experience Team on 01932 723553 or email [asp-tr.patient.advice@nhs.net](mailto:asp-tr.patient.advice@nhs.net). If you remain concerned, the team can also advise upon how to make a formal complaint.

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## What happens after the recording?

You can leave the department after both these tests. In many cases we are able to give you a report immediately after the test, and this will be the same report which we send to the doctor who referred you to us.

## What happens next?

This report is sent to your hospital consultant and he or she will discuss the result of the EMG test with you at a later date. A copy may be sent to your GP.

## Preparing for the NCS and EMG

Unless we ask you to change, carry on taking all your usual medication as recommended by your doctor. If possible bring a list of all your medications with you.

- If you take **warfarin** we like to know your INR. Please ring the department with your last reading about one week before the test, in case we need to postpone or modify the test.
- If you have myasthenia gravis and are taking **pyridostigmine (Mestinon)** please phone us to discuss reducing the dose.

It is also important to tell us if you have a pacemaker implanted. Ordinary pacemakers do not usually cause problems. If you have an **implantable cardiac defibrillator (ICD)**, please ring us before the test., so that we can make arrangements with our cardiology department to carry out the test with their help.

In some cases we may ask if you have had any injuries which might have left metal pieces in you, particularly injuries to the eye.

You can eat as normal, including meals on the day of the test. We suggest you wear loose, comfortable clothing – we may need to examine both arms and legs, even for simple problems. Please avoid putting skin creams on before the test.

It helps to keep your hands and feet warm whilst you are on your way into the hospital. On your arrival in the department we may

ask you to wash the parts to be examined, and help you to warm them if necessary.

## Arriving at St Peter's Hospital

If you are unable to attend on the day of the test, please do let us know, using the contact details at the end of this booklet.

Our department is in the main outpatient block at St Peter's Hospital. Please make your way to level two. Ours is the first clinical area on the right in the main outpatient corridor with green dots on the corridor walls. If you know St Peter's, this area is just behind the W H Smith Shop and to the right of the Pharmacy. The signs say 'EEG / EMG' and 'West Surrey Clinical Neurophysiology'. It may be helpful to bring this booklet with you to show people if asking directions.

The nearest car park is the main outpatient car park at the front of the hospital. Please note St. Peters Hospital operates payment parking systems. Further details are available online at <http://www.ashfordstpeters.nhs.uk/patients/getting-here/traveling-to-st-peter-s>

It is helpful if you can arrive about 10 – 15 mins before the appointment time shown on the accompanying letter. We have only limited space in our waiting room, if you arrive earlier at the hospital you will be asked to wait elsewhere. There is a café at the main outpatient entrance nearby. We aim to keep to our appointment times, but if we are running late we shall let you know and we ask for your patience.

## What happens during the NCS and EMG?

Your test will be carried out by either a medical doctor or a clinical physiologist, who will meet you in our waiting room and take you to the recording room. We shall explain the test to you and this is a good time to ask any questions you still have. We will also ask you about your particular problem and about your health in general.

**Nerve conduction studies** are tests of the nerves in the arms and legs. They are a bit like testing house wiring. We use small moist or sticky pads on the skin to record the signals over muscles and nerves. We stimulate the nerves, usually with small electric pulses. Some of these tests make your muscles twitch. The sensation is strange and some people find it a bit uncomfortable. These tests usually take about 30 minutes but can take longer. There are no after effects from these tests.

**Electromyography** is only needed in some patients and most have NCS carried out first. We use very small needles to record from your muscles. These are a bit like acupuncture needles so most people do not find them uncomfortable. Your muscles may feel a little sore for a few hours afterwards.

**Magnetic stimulation** is used for some special tests in a small number of patients, in addition to the electrical stimulation. The magnetic pulses are given by a coil held over the part to be stimulated. It is similar to the electrical stimulation. However the magnetic stimulation cannot be carried out if you have pacemakers or pumps implanted or if you have any fragments of metal in the eye or elsewhere.