

Nerve conduction study (NCS)

Information and advice for patients

Neurophysiology

What is a nerve conduction study?

A nerve conduction study is a test to check how your nerves are working. It involves pads/rings being placed on your skin which cause a tingling/tapping sensation and then recording how your nerves respond.

What is the benefit of the test?

The benefit of the test is that they will show how the nerves in the arms are working to find out if there is a trapped nerve at the wrist.

What are the risks of the test?

There are no risks although you might find it a little uncomfortable.

The tests may affect the older generation of pacemakers so if you have a pacemaker please contact us on 0121 507 4319 so we can discuss this with you.

What are the risks of not having the test?

If you choose not to have the nerve conduction study this may delay your doctor finding out what is causing your symptoms and starting treatment.

Are there any alternative tests?

There is usually no alternative to this test that will give your doctor the information they need.

Preparing for the test

- Wear clothes that allow easy access to the tops of your arms otherwise you may need to wear a hospital gown
- Do not wear too much jewellery as you may need to remove it all for the test.
- Continue to take any medicines as usual and bring a list of these with you to the appointment.
- Try and make sure your hands are warm for the test by wearing gloves
- Do not apply creams or ointments on the day of the test as they can make it difficult to get a good reading.
- Contact the department on 0121 507 4319 if you have a pacemaker or are taking blood-thinning medications such as warfarin as you may need more information.

If you are unable to keep this appointment please contact us on 0121 507 4319 so that alternative arrangements can be made and the appointment can be given to another patient waiting for the test.

Nerve conduction study (NCS)

Information and advice for patients

Neurophysiology

Before the test we will ask you if you have read and understood this information and whether you consent to go ahead with it. We will also answer any questions you have.

During the test

The tests take 30 minutes - 1 hour.

The nerve conduction study will be performed by a clinical physiologist. This is what happens:

1. Pads or rings will be placed on your skin.
2. You will feel a tingling or tapping sensation from the pads/rings.
3. The response of your nerve is then recorded from a pad placed further along the nerve.
4. Different nerves are tested to compare and see which, if any, are affected.

What do I feel during the test?

The tests may be slightly uncomfortable but are usually easily tolerated.

After the test

After the test you will be able to go back to your normal activities.

When will I get the results?

You won't get the results straight after the test as they need to be analysed by the consultant. A full report will be sent to the doctor who referred you for the test after about 2 weeks and they will contact you to discuss the results.

Contact details

You will be able to ask any questions or tell us any concerns before the test is carried out but if you would like to contact us before your appointment please call us on:

Tel: 0121 507 4319

Monday – Friday, 9am – 4pm

Further information

For more information about our hospitals and services please see our website www.swbh.nhs.uk, follow us on Twitter @SWBHnhs and like us on Facebook www.facebook.com/SWBHnhs.

Nerve conduction study (NCS)

Information and advice for patients

Neurophysiology

Sources used for the information in this leaflet

- American Association of Neuromuscular & Electrodiagnostic Medicine (AANEM) (2014) *Risks in electrodiagnostic medicine*. Available at: <https://www.aanem.org/getmedia/653e87b3-f930-4951-9bd8-dde95c291ce2/risksinEDX.pdf> (Accessed: 22 August 2020).
- Kane, N. M., & Oware, A. (2012). Nerve conduction and electromyography studies. *Journal of neurology*, 259(7), 1502-1508.
- LaBan, M. M., Petty, D., Hauser, A. M., & Taylor, R. S. (1988). Peripheral nerve conduction stimulation: its effect on cardiac pacemakers. *Archives of physical medicine and rehabilitation*, 69(5), 358.

If you would like to suggest any amendments or improvements to this leaflet please contact SWB Library Services on ext 3587 or email swbh.library@nhs.net.



A Teaching Trust of The University of Birmingham
Incorporating City, Sandwell and Rowley Regis Hospitals
© Sandwell and West Birmingham Hospitals NHS Trust

ML5572

Issue Date December 2020

Review Date: December 2023