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EMG/NCS TESTING INFORMATION

PLEASE ARRIVE 15 MINUTES EARLY
and
BRING YOUR EMG/NCS ORDER/Rx TO THE APPOINTMENT

EMG = electromyography

ELECTRO = electric

MYO = muscle

GRAPHY = writing

NCS = Nerve Conduction Study

An EMG/NCS is a recording of electrical activity of the nerves and muscles. An EMG is used to diagnose diseases of nerves and muscles.

WHY EMG/NCS's ARE DONE

- To discover cause of muscle weakness, spasms, paralysis, or pain in the arms, legs or face
- To determine if disease involves spinal cord, nerves, muscles or the nerve-muscle junction

WHAT DOES ELECTRICAL ACTIVITY HAVE TO DO WITH NERVES & MUSCLES

Nerve cells transmit messages via electricity. Their electrical impulses stimulate muscles to move. When nerves and muscles are diseased, electrical patterns change.

PREPARING FOR AN EMG/NCS

It is really quite simple. At home:

- Eat your normal meals
- Take your normal medications
- Bath and/or shower on the morning of the exam. Scrub your arms and legs well to remove any body oils.
- Do not use bath oils, lotions or creams
- If you are on Mestinon (Pyridostigmine), **do not** take this medication before your test.

***** NEXT PAGE →**

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HOW EMG/NCS WORKS

There are 2 parts to the test:

1. Your nerves are tested first. A small electrical signal stimulates your nerves and we measure how long and how fast (velocity) is the electrical signal of the nerve (NCS).
2. A tiny needle is inserted into a muscle. It records electrical activity of the muscle (EMG):
 - During insertion
 - While muscle is at rest
 - While muscle contracts.

Nerve and muscle diseases alter the pattern of electrical activity in muscles.

The muscle will be tested in three positions:

1. Resting
2. Slight flex
3. Full flex

After the first muscle is tested, the needle may be removed and inserted into another muscle. The total testing time may range from a few minutes (if one muscle is tested) to over an hour (if several muscles are involved).

For your information, sterile disposable EMG needles are utilized.

SOME CONDITIONS DETECTED BY EMG/NCS ARE:

- PINCHED NERVES and INFLAMMED MUSCLES: due to injury, ruptured disk, disease or other conditions
- CARPAL TUNNEL SYNDROME: due to pressure on a nerve in the wrist or hand
- NEUROPATHY: diseases of the peripheral nerves
- MYOPATHY: diseases of the muscles

AFTER THE EXAMINATION

You may feel tenderness in the tested muscles. This usually lasts only a few hours. You may return home after the test is complete. Preliminary tests results are usually available in 2-4 business days. Please call your doctor for the results.

If you have any questions or need to cancel or reschedule your appointment please feel free to contact our office at 847-882-6604

Phone Hours: 9:00 am – 4:30 pm

For more information on our practice please visit our website:
www.northwestneuro.com

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