# DR MELINDA PASCOE
## Neurologist & Neurophysiologist

**EMG NERVE CONDUCTION STUDY INFORMATION AND PREPARATION**

Electrophysiological studies are referred to as an EMG, but should include an electromyogram (EMG) and a nerve conduction study (NCS). The EMG measures the electrical activity of muscles at rest and during contraction, while the NCS measures how well and how fast the nerves can send electrical signals. An EMG can confirm or verify the objective (as observed by the examining specialist) and subjective (as experiences by the patient) neurological signs. An EMG can also pick up sub clinical damage to nerves and consequently to the muscle prior to that damage being readily observable in a neurological examination.

An EMG may be ordered by your doctor if you are experiencing symptoms such as:

- Tingling or numbness
- Muscle weakness/pain or cramping
- Certain types of limb pain

An EMG is often used to diagnose or rule out a number of conditions such as:

- Muscle disorders, such as muscular dystrophy or polymyositis
- Diseases affecting the connection between the nerve and the muscle, such as myasthenia gravis
- Disorders of nerves outside the spinal cord (peripheral nerves), such as carpal tunnel syndrome or peripheral neuropathies
- Disorders that affect the motor neurons in the brain or spinal cord, such as amyotrophic lateral sclerosis or polio
- Disorders that affect the nerve root, such as a herniated disk in the spine

**THE TEST CONSISTS OF TWO PARTS**

**1. Nerve Conduction Studies (NCS)**

Assess the conductivity of the nerves peripherally and test how well the nerve transmits these currents to give sensation or muscle action.

**2. Electromyography (EMG)**

Test the muscle unit and gives information not only about the muscle itself but also the peripheral nerve along its entire course after it exits the spinal cord. It tells whether the muscle is functioning normally and whether there is dysfunction of either the nerve going to the muscle or the muscle itself.

**What to expect during your test**

Electrodes will be placed on different areas related to where your are experiencing your symptoms. These will transmit tiny electrodes that may feel like a twinge or spasm. Your Neurologist may also insert needle electrodes at different sites depending on your symptoms. If you are concerned about pain or need a break please advise Dr Pascoe.

**Preparation for your EMG**

Please allow 30 minutes for this test.
No creams/ lotions or perfume to be on skin where we are testing.
Please do not stop taking any regular medications.
Please wear underwear and enclosed foot wear.
Warm feet are necessary to proceed with this test. If you feel cold please advise us prior to the start of the test so we can provide you with a blanket and/or heat pack.

**Cost** $520 Rebate $190 (as of November 2018, please confirm when booking).