

# Single Fibre EMG (SFEMG) and Repetitive Nerve Stimulation (RNS)

An information guide



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## What is Single Fibre EMG? (SFEMG)

Single Fibre EMG stands for Single Fibre Electromyography (SFEMG). SFEMG is an extremely sensitive test of the function of the neuromuscular junction (the connection between the nerve and the muscle). It assesses the electrical activity of a single muscle fibre in response to repetitive electrical stimuli.

## Why is Single Fibre EMG performed?

SFEMG is performed when you have variable muscle weakness and other tests for neuromuscular junction disorders are negative.

**Repetitive Nerve Stimulation (RNS)** consists of a series of ten electrical stimuli which are applied to a motor nerve and the responses are recorded from a muscle supplied by that nerve. The test is generally performed after brief exercise of the muscle.

## What does the test involve?

The test will be performed by a Consultant Neurophysiologist and may take up to **1 hour and 20 minutes**. Firstly you will be asked some questions about your medical history (mainly about your symptoms and medication). You will have the chance to ask any questions that you have.

During the test you will sit in a reclining chair and asked to relax, two very fine needles are used. One is inserted in the side of the face to stimulate a nerve which makes the muscle around the eye twitch. The other fine needle is inserted into the twitching muscle to record the activity. The needle electrodes will stay in place throughout the test. Nothing will be injected into you and no blood

will be taken. The test will be explained to you in detail when you attend for your appointment.

### **What preparation is needed?**

No special preparation is needed before the test.

Please note that children/babies will not be allowed in the room where the test is being carried out, therefore if you need to bring a child with you, you must ensure that someone is with you who can supervise them.

### **Medication**

Please continue to take any medication as normal. You do not need to stop any medication for this test.

### **Botox**

If you have had Botox injection in any part of the body, please advise the department when booking your appointment. Botox can affect the test and give false results.

### **Why do I have to come to North Manchester General Hospital?**

SFEMG investigation is not available at the other hospital sites within Pennine Acute Hospitals NHS Trust, therefore although you may have originally seen a doctor at another hospital site you have been referred to North Manchester General Hospital.

### **After the investigation**

Once the test is complete you can go home and carry on as normal straight afterwards. There may be some slight bleeding or bruising where the needles were positioned, however this is unlikely to bother you for very long. Other than this Single Fibre EMG or Repetitive Nerve Stimulation has no side effects.

### **Contacting us**

If you have any questions about the issues raised above, or have any other concerns, please contact the department on 0161 720 2780.

**If English is not your first language and you need help, please contact the Interpretation and Translation Service**

Jeśli angielski nie jest twoim pierwszym językiem i potrzebujesz pomocy, skontaktuj się z działem tłumaczeń ustnych i pisemnych

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**For general enquiries please contact the Patient Advice and Liaison Service (PALS) on 0161 604 5897**


**For enquiries regarding clinic appointments, clinical care and treatment please contact 0161 624 0420 and the Switchboard Operator will put you through to the correct department / service**

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The NCA brings together Salford Royal NHS Foundation Trust and the hospitals and community services of The Royal Oldham Hospital, Fairfield General Hospital in Bury, and Rochdale Infirmary (currently part of The Pennine Acute Hospitals NHS Trust).

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