**Building healthier lives** 

# Single Fibre Electromyography (SFEMG)

### What is Single Fibre EMG?

Single fibre EMG stands for single fibre electromyography. It is a very sensitive test which can give us information about the connection between the muscle and nerve (neuromuscular junction). The results can provide useful information to the consultant who has referred you for the assessment of your symptoms.

## Before the Single Fibre EMG

- Other tests: You may have to go through some routine Nerve Conduction Studies/Electromyography (NCS/EMG). If you have not had them before, please see the enclosed information sheet "Nerve Conduction Studies and Electromyography" for these tests.
- 2. We do not recommend you stop any medications before the test (e.g. Pyridostigmine) unless you have been told to do so by your referring doctor.

#### What happens during the Single Fibre EMG test?

There are two ways of doing the test. We may need to perform both or either one of them, depending on your condition. These two methods are as follows:

- 1. **Stimulated SFEMG:** We will place a very fine needle electrode into the muscle over your cheek bone, which you will feel as a small scratch, and stimulate your facial nerve, resulting in slight twitching of your eye and face muscles. We then place another fine needle electrode in the muscle above your eyebrow. This is to record the activity from the twitch. More than one recording will be made.
- 2. Volitional SFEMG: We will keep the needle electrode in the muscle above your eyebrow in place or we may need to place it in a muscle on your forehead. Then we will ask you to look up or down, depending on which muscle we record from. Again more than one recording will be made.

**Important Note:** The small size of the needle means that it should not be too uncomfortable. As with all needles, this can sometimes leave a bruise and the muscles may feel sore for a while after the test. The entire test may take up to 90 minutes.

## After the Single Fibre EMG

The results of the test need to be analysed afterwards by the Consultant Clinical Neurophysiologist and a full report will be sent to the consultant who referred you for the test.

Single Fibre EMG testing is a very safe procedure and you can return to your normal daily activities immediately after the test. There may be some slight bleeding or bruising where the needle was positioned, however, this is unlikely to bother you for very long. Other than this there should be no side effects. Please contact your GP if you are concerned about bruising or pain following the procedure.

If you require any further information, please contact the Neurophysiology department on:

#### 0121 371 6420 Monday–Friday, 8.30am–4.30pm

Neurophysiology Queen Elizabeth Hospital Birmingham Mindelsohn Way, Edgbaston Birmingham B15 2GW Telephone: 0121 627 2000

If you require this information in another format, such as a different language, large print, braille or audio version please ask a member of staff or email <u>interpreting.service@uhb.nhs.uk</u>