

What are the benefits from using FES?

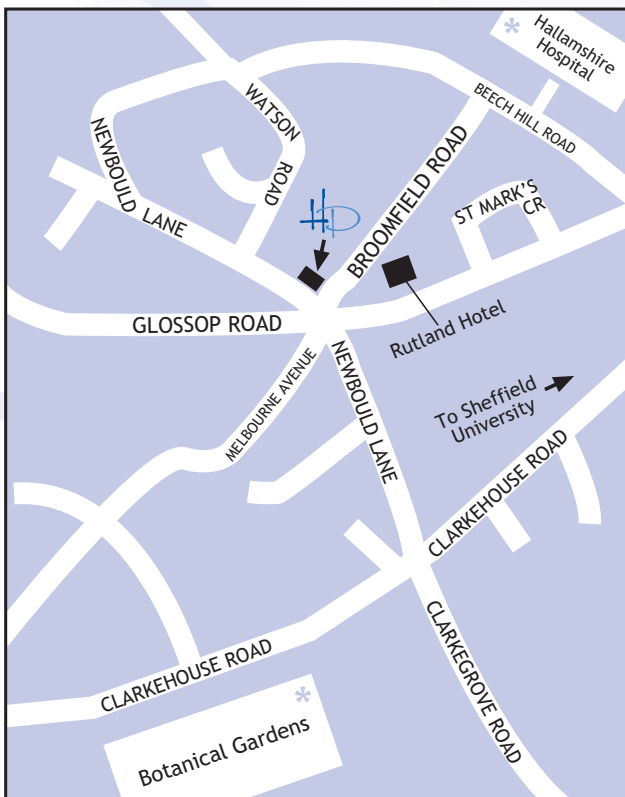
It has been proven in clinical trials that patients using FES for their walking have shown an improvement in their speed, confidence and with less effort. In some cases it has helped to reduce muscle stiffness. Other patients using FES have found that after a few months their walking in sufficiently improved that they no longer need to use it.



Is FES suitable for me?

The only way to know is to undergo an assessment by a qualified clinician.

If you feel you may benefit from FES and would like an assessment you can contact The Hallamshire Physiotherapy Clinic on 0114 2671223.



Call for advice or to make an appointment on:

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Functional Electrical Stimulation (FES)

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➤ **Functional Electrical Stimulation is used to assist patients with problems lifting their foot when walking (dropped foot). This can cause people to fall or trip.**

➤ **What is Functional Electrical Stimulation (FES)?**
FES aims to produce small electrical impulses to stimulate paralysed muscles in order to create useful and efficient movement as an aid to walking. Electrodes (adhesive patches) are placed over the skin and near to the nerve supplying the muscle. Small electrical impulses are sent from a stimulator that produce muscle contractions.



➤ **Who would benefit from FES?**

For FES to work it is important that the nerve fibres that run between the spinal cord and muscles are undamaged.

FES can be used for the following conditions:

- Stroke
- Multiple Sclerosis (MS)
- Spinal cord injuries (above T12)
- Brain injury
- Parkinson's Disease (PD)
- Any other *upper motor neurone* lesion which can lead to dropped foot



➤ **FES and 'Dropped Foot'**

Dropped foot occurs when the muscles which lift the foot are weak and / or there is excessive tightness in the calves. This leads to the toes catching or dragging on the floor when walking which can be very distressing as well as putting the person at risk of falling.

FES can be used successfully to activate the muscles that lift the foot and help prevent dropped foot, making walking quicker, more efficient and reducing the risk of falling.

➤ **How is it applied?**

The electrodes are placed on the front of the lower leg and attached to a stimulator which can be clipped on a waist band, belt or even put in a pocket. A switch in the shoe triggers the stimulator and causes the muscle to be activated when walking. The stimulator is roughly the size of a pack of cards and requires a battery.



➤ **Are there any risks or side effects caused by FES?**

When the stimulator is switched on you will feel a pins and needles sensation which the majority of patients find comfortable. Rarely the electrodes cause skin irritation which can usually be helped with changing to hypoallergenic electrodes or modifying the type of stimulation used.

