

Skin surface applied functional electrical stimulation for an orthotic effect to correct foot drop of central neurological origin

NHS Devon

Commissioning policy

The Peninsula Commissioning Priorities Group (PCPG) has come to a decision on the use of skin surface applied functional electrical stimulation (FES) as an orthotic intervention to improve walking impaired by foot drop of central neurological origin.

FES delivered by skin surface electrodes may be offered by service providers under contractual provisions for physiotherapy services to patients for whom ankle foot orthoses (AFO) have not been suitable. This will include: assessment by physiotherapists trained to provide FES and AFO as part of the complete physiotherapy service offered; early assessment of benefit; ongoing easily accessible patient review; and annual audit results communicated to commissioners.

Rationale for the decision

Electrical stimulation from skin surface electrodes to the peroneal nerve, timed to the swing phase of step, has been shown to improve walking speed to a greater extent than physiotherapy alone in patients suffering foot drop that persisted at least six months following a stroke. Professional guidelines highlight uncertainties in the evidence for the routine use of FES. The Group considered that the evidence available was sufficient to support a service that offered FES as part of a range of physiotherapy interventions aimed at providing an immediate improvement in walking speed and efficiency. A reduction in the risk of falls is an aim of therapy but evidence is limited. There are data from a study conducted in patients with foot drop

due to multiple sclerosis that suggest a beneficial effect on the risk of falls but more robust clinical research data are needed.

There is also uncertainty about the improvement in health related quality of life that FES brings about. The cost effectiveness of providing FES is not clearly understood. Audit is considered as a suitable means to collect data, assess outcomes and provide a mechanism for peer review.

Guidance notes on exceptionality

Where the circumstances of treatment for an individual patient do not meet the criteria described above exceptional funding can be sought.

Plain language summary

Electrical stimulation provided by a portable battery device can be used to correct an impaired ability to flex the ankle upwards whilst walking (foot drop). The usual way of overcoming this is by the use of a range of simple mechanical devices to prevent the foot from dropping. These do not prove suitable for all patients. Under these circumstances a physiotherapist may consider a trial of the electrical stimulation method worthwhile. Specially trained physiotherapists can provide this as part of the service which they are contracted to provide, and are usually able to rapidly assess benefit in conjunction with the patient. There are gaps in the research evidence although it is known that the technique is acceptably safe. Contracted providers are expected to keep records and provide anonymous data to the NHS commissioners to help improve understanding of the benefits that can be gained.

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