



Effective Health Care

Electrical Stimulation for the Treatment of Foot Drop Nomination Summary Document

Results of Topic Selection Process & Next Steps

- The topic, *Electrical Stimulation for the Treatment of Foot Drop*, is not feasible for a full systematic review due to the limited data available at this time.
- This topic could potentially be considered for new research in comparative effectiveness.

Topic Description

Nominator(s): Individual

Nomination Summary: Since high-tech interventions have recently become available to treat symptoms of brain injuries, such as foot drop, clinicians are faced with decisions regarding whether or not these high-tech interventions are more effective than other traditional low-tech interventions. The nominator is specifically interested in the effectiveness of electrical stimulation (e-stim) in treating foot drop in patients who experienced a brain injury in the previous five years.

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Population(s): Patients with a non-progressive brain injury (e.g., cardiovascular accident [stroke], traumatic brain injury [TBI]) within the previous five years resulting in foot drop

Intervention(s): E-stim (temporary use as part of therapy and long-term use)

Comparator(s): Somatic education (e.g., Hanna Somatic Education, Feldenkrais Method); other interventions such as ankle foot orthoses, physical therapy, or surgery

Outcome(s): Daily activities of living, functional status, quality of life, body function, functional mobility (timed up and go), extent of dorsiflexion, walking endurance (6-minute walk test), walking speed, balance (Berg balance scale, functional reach test), falls and other adverse events

Timing: Treatment initiated within five years of brain injury

Key Questions from Nominator: Does the use of e-stim on the lower extremity have any effect on foot drop in people with brain injury (e.g., stroke or TBI)?

The nominator was also specifically interested in somatic education as a comparator to e-stim. However, based on a preliminary scan of the literature, we found limited evidence related to treatment of foot drop with somatic education compared to e-stim. Therefore, a broader set of comparators was considered for this review.

Considerations

- The topic meets EHC Program selection criteria. (For more information, see <http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>)
- This topic is important due to the current challenge faced by providers regarding whether the high-tech intervention of e-stim is more effective than other interventions such as ankle foot orthoses, physical therapy, or surgery.
- Only a small number of studies have been conducted in recent years comparing the use of e-stim to other interventions in patients with foot drop resulting from brain injuries. Most of these focus primarily on patients who have had a stroke. Our search did not yield any studies that compared e-stim to somatic education. Therefore, this topic is not feasible for a full systematic review due to the limited data at this time.