



Medical Policy

Threshold Electrical Stimulation as a Treatment of Motor Disorders

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Policy Number: 321

BCBSA Reference Number: 1.01.19

NCD/LCD: National Coverage Determination (NCD) for Treatment of Motor Function Disorders with Electric Nerve Stimulation (160.2)

Related Policies

- NMES (Neuromuscular Electrical Stimulation), [#201](#)

Policy

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity

Threshold electrical stimulation as a treatment of motor disorders, including but not limited to cerebral palsy is [NOT MEDICALLY NECESSARY](#).

Medicare HMO BlueSM and Medicare PPO BlueSM Members

BCBSMA does not cover threshold electrical stimulation as a treatment of motor disorders, including but not limited to cerebral palsy, for Medicare HMO Blue and Medicare PPO Blue members in accordance with CMS NCD.

National Coverage Determination (NCD) for Treatment of Motor Function Disorders with Electric Nerve Stimulation (160.2)

<http://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=22&ncdver=2&bc=AgAAgAAAAAA&>

Prior Authorization Information

Pre-service approval is required for all inpatient services for all products.

See below for situations where prior authorization may be required or may not be required for outpatient services.

Yes indicates that prior authorization is required.

No indicates that prior authorization is not required.

N/A indicates that this service is primarily performed in an inpatient setting.

Outpatient

Commercial Managed Care (HMO and POS)	This is not a covered service.
Commercial PPO and Indemnity	This is not a covered service.
Medicare HMO BlueSM	This is not a covered service.
Medicare PPO BlueSM	This is not a covered service.

CPT Codes / HCPCS Codes / ICD Codes

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

CPT Codes

There is no specific CPT code for this service.

ICD-9 Diagnosis Codes

Investigational for all diagnoses.

Description

Threshold electrical stimulation is described as the delivery of low-intensity electrical stimulation to target spastic muscles during sleep at home. The stimulation is provided by a small electrical generator, lead wires, and surface electrodes that are placed over the targeted muscles; it is not intended to cause muscle contraction. Although the mechanism of action is not understood, it is thought that low-intensity stimulation may increase muscle strength and joint mobility, leading to improved voluntary motor function. The technique has been used most extensively in children with spastic diplegia related to cerebral palsy but also in those with other motor disorders, such as spina bifida.

Summary

The studies published to date demonstrate that threshold electrical stimulation is not effective for treatment of spasticity, muscle weakness, reduced joint mobility, or motor function; therefore the treatment is considered not medically necessary.

Policy History

Date	Action
11/2011-4/2012	Medical policy ICD 10 remediation: Formatting, editing and coding updates. No changes to policy statements.
6/2011	Reviewed 6/2011 MPG – Orthopedics, Rehabilitation and Rheumatology. No changes to policy statements.
5/1/2011	New policy, effective 5/1/2011, describing ongoing non-coverage.

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)

[Managed Care Guidelines](#)

[Indemnity/PPO Guidelines](#)

[Clinical Exception Process](#)

[Medical Technology Assessment Guidelines](#)

References

1. Steinbok P, Reiner A, Kestle JR. Therapeutic electrical stimulation (ThresholdES) following selective posterior rhizotomy in children with spastic diplegic cerebral palsy: a randomized clinical trial. *Dev Med Child Neurol* 1997; 39(8):515-20.
2. Dali C, Hansen FJ, Pedersen SA et al. Threshold electrical stimulation (TES) in ambulant children with CP: a randomized double-blind placebo-controlled clinical trial. *Dev Med Child Neurol* 2002; 44(6):364-9.
3. van der Linden ML, Hazlewood ME, Aitchison AM et al. Electrical stimulation of gluteus maximus in children with cerebral palsy: effects on gait characteristics and muscle strength. *Dev Med Child Neurol* 2003; 45(6):385-90.
4. Fehlings DL, Kirsch S, McComas A et al. Evaluation of therapeutic electrical stimulation to improve muscle strength and function in children with types II/III spinal muscular atrophy. *Dev Med Child Neurol* 2002; 44(11):741-4.
5. Ozer K, Chesher SP, Scheker LR. Neuromuscular electrical stimulation and dynamic bracing for the management of upper-extremity spasticity in children with cerebral palsy. *Dev Med Child Neurol*. 2006; 48(7):559-63.
6. Kerr C, McDowell B, Cosgrove A et al. Electrical stimulation in cerebral palsy: a randomized controlled trial. *Dev Med Child Neurol* 2006; 48(11):870-6.
7. Lannin N, Scheinberg A, Clark K. AACPD systematic review of the effectiveness of therapy for children with cerebral palsy after botulinum toxin A injections. *Dev Med Child Neurol* 2006; 48(6):533-9.
8. The National Institute of Neurological Disorders and Stroke. Cerebral Palsy: Hope through research. Last updated June 13, 2011. Available online at: http://www.ninds.nih.gov/disorders/cerebral_palsy/detail_cerebral_palsy.htm#179393104 . Last accessed September 2011.