

Protocol

Pelvic Floor Stimulation as a Treatment of Urinary and Fecal Incontinence

(10117)

(Formerly Pelvic Floor Stimulation as a Treatment of Urinary Incontinence)

Medical Benefit	Effective Date: 07/01/14	Next Review Date: 05/15
Preadmission	No	Review Dates: 01/08, 11/08, 09/09, 05/10, 05/11, 05/12, 05/13, 05/14

*The following Protocol contains medical necessity criteria that apply for this service. It is applicable to Medicare Advantage products unless separate Medicare Advantage criteria are indicated. If the criteria are not met, reimbursement will be denied and the patient cannot be billed. **Preadmission is not required but is recommended if, despite this Protocol position, you feel this service is medically necessary.** Please note that payment for covered services is subject to eligibility and the limitations noted in the patient's contract at the time the services are rendered.*

Description

Pelvic floor stimulation (PFS) is proposed as a nonsurgical treatment option for women and men with urinary incontinence. This approach involves either electrical stimulation of pelvic floor musculature or extracorporeal pulsed magnetic stimulation. Electrical stimulation of the pelvic floor is also proposed as a treatment of fecal incontinence.

Background

Pelvic floor stimulation (PFS) involves the electrical stimulation of pelvic floor muscles using either a probe wired to a device for controlling the electrical stimulation or, more recently, extracorporeal electromagnetic (also called magnetic) pulses. The intent of the intervention is to stimulate the pudendal nerve in order to activate the pelvic floor musculature; it is thought that activation of these muscles will lead to improved urethral closure. In addition, PFS is thought to improve partially denervated urethral and pelvic floor musculature by enhancing the process of reinnervation. The methods of electrical PFS have varied in location (e.g., vaginal, rectal), stimulus frequency, stimulus intensity or amplitude, pulse duration, pulse to rest ratio, treatments per day, number of treatment days per week, length of time for each treatment session, and overall time period for device use between clinical and home settings. Variation in the amplitude and frequency of the electrical pulse is used to mimic and stimulate the different physiologic mechanisms of the voiding response, depending on the type of etiology of incontinence, i.e., either detrusor instability, stress incontinence, or a mixed pattern. Magnetic PFS does not require an internal electrode; instead, patients sit fully clothed on a specialized chair with an embedded magnet.

Patients receiving electrical PFS may undergo treatment in a physician's office or physical therapy facility, or patients may undergo initial training in a physician's office followed by home treatment with a rented or purchased pelvic floor stimulator. Magnetic PFS may be delivered in the physician's office.

PFS was first proposed as a treatment for urinary incontinence and later also proposed as a treatment for fecal incontinence. Incontinence, especially urinary, is a common condition and can have a substantial impact on quality of life. Nonsurgical treatment options for incontinence may include pharmacologic therapy, pelvic floor muscle exercises, bowel or bladder training exercises, electrical stimulation, and neuromodulation.

Regulatory Status

Several electrical stimulators have been cleared by the U.S. Food and Drug Administration (FDA). In March 2006, the MyoTrac Infiniti™ (Thought Technology, Ltd.), a nonimplanted electrical stimulator for treating urinary incontinence, was cleared for marketing by the FDA through the 510(k) process. Predicate devices, also used to treat urinary incontinence, include the Pathway™ CTS 2000 (Prometheus Group) and the InCare® PRS (Hollister Inc.). In 2011, the iTouch Sure Pelvic Floor Exerciser (Tenscare, U.K.) was cleared for marketing. This product is being marketed in the U.S. as EmbaGYN® by Everett Laboratories (Chatham, NJ).

In June 2000, the NeoControl® Pelvic Floor Therapy System (Neotonus, Inc.) was approved by the FDA through the premarket approval process for treating urinary incontinence in women. This device, formerly known as the Neotonus Model 1000 Magnetic Stimulator, provides noninvasive electromagnetic stimulation of pelvic floor musculature. The magnetic system is embedded in a chair seat; patients sit on the chair fully clothed and receive the treatment. The magnetic fields are controlled by a separate power unit.

In February 2014, the InTone® MV (InControl Medicine; Brookfield, WI), a nonimplantable device that provides electrical stimulation and/or biofeedback via manometry, was cleared by the FDA. The device is intended for the treatment of male and female urinary and fecal incontinence.

A search of the FDA website in March 2014 did not identify any other nonimplantable electrical stimulators or any magnetic stimulators cleared for treatment of fecal incontinence.

Related Protocols

Sacral Nerve Neuromodulation/Stimulation for Pelvic Floor Dysfunction

Posterior Tibial Nerve Stimulation for Voiding Dysfunction

Policy (Formerly Corporate Medical Guideline)

Electrical or magnetic stimulation of the pelvic floor muscles (pelvic floor stimulation) as a treatment for urinary incontinence is considered **investigational**.

Electrical or magnetic stimulation of the pelvic floor muscles (pelvic floor stimulation) as a treatment for fecal incontinence is considered **investigational**.

Medicare Advantage

Pelvic floor electrical stimulation with a non-implantable stimulator is **medically necessary** for the treatment of stress and/or urge urinary incontinence in cognitively intact patients who have failed a documented trial of pelvic muscle exercise (PME) training.

A failed trial of PME training is defined as no clinically significant improvement in urinary continence after completing four weeks of an ordered plan of pelvic muscle exercises designed to increase periurethral muscle strength.

Services that are the subject of a clinical trial do not meet our Technology Assessment Protocol criteria and are considered investigational. *For explanation of experimental and investigational, please refer to the Technology Assessment Protocol.*

It is expected that only appropriate and medically necessary services will be rendered. We reserve the right to conduct prepayment and postpayment reviews to assess the medical appropriateness of the above-referenced procedures. **Some of this Protocol may not pertain to the patients you provide care to, as it may relate to products that are not available in your geographic area.**

References

We are not responsible for the continuing viability of web site addresses that may be listed in any references below.

1. Blue Cross and Blue Shield Association Technology Evaluation Center (TEC). Pelvic floor electrical stimulation in the treatment of urinary incontinence in adults. TEC Assessments 2000; Volume 15, Tab 2.
2. Blue Cross and Blue Shield Association Technology Evaluation Center (TEC). Magnetic stimulation in the treatment of urinary incontinence in adults. TEC Assessments 2000; Volume 15, Tab 8
3. Imamura M, Abrams P, Bain C et al. Systematic review and economic modeling of the effectiveness and cost-effectiveness of non-surgical treatments for women with stress urinary incontinence. Health Technology Assessment 2010; Volume 14, No. 40. Available online at: <http://www.hpa.ac.uk/1612>. Last accessed March, 2014.
4. Shamliyan T, Wyman J, Kane R. Agency for Healthcare Research and Quality (AHRQ): Nonsurgical Treatments for Urinary Incontinence in Adult Women: Diagnosis and Comparative Effectiveness. 2012. Available online at: <http://effectivehealthcare.ahrq.gov/ehc/products/169/834/urinary-incontinence-treatment-report-130909.pdf>. Last accessed 2014, March.
5. Goode PS, Burgio KL, Locher JL et al. Effect of behavioral training with or without pelvic floor electrical stimulation on stress incontinence in women: a randomized controlled trial. *Jama* 2003; 290(3):345-52.
6. Wang AC, Wang YY, Chen MC. Single-blind, randomized trial of pelvic floor muscle training, biofeedback-assisted pelvic floor muscle training, and electrical stimulation in the management of overactive bladder. *Urology* 2004; 63(1):61-6.
7. Castro RA, Arruda RM, Zanetti MR et al. Single-blind randomized, controlled trial of pelvic floor muscle training, electrical stimulation, vaginal cones and no active treatment in the management of stress urinary incontinence. *Clinics (Sao Paulo)* 2008; 63(4):465-72.
8. Berghmans B, Hendriks E, Bernards A et al. Electrical stimulation with non-implanted electrodes for urinary incontinence in men. *Cochrane Database Syst Rev* 2013; 6:CD001202.
9. Zhu YP, Yao XD, Zhang SL et al. Pelvic floor electrical stimulation for postprostatectomy urinary incontinence: a meta-analysis. *Urology* 2012; 79(3):552-5.
10. Campbell SE, Glazener C, Hunter KF et al. Conservative management for postprostatectomy urinary incontinence. *Cochrane Database Syst Rev* 2012; (1):CD001843.
11. Goode PS, Burgio KL, Johnson TM et al. Behavioral therapy with or without biofeedback and pelvic floor electrical stimulation for persistent postprostatectomy incontinence. *JAMA* 2011; 305(2):151-9.
12. Yamanishi T, Mizuno T, Watanabe M et al. Randomized, placebo controlled study of electrical stimulation with pelvic floor muscle training for severe urinary incontinence after radical prostatectomy. *J Urol* 2010; 184(5):2007-12.

13. Hosker G, Cody JD, Norton CC. Electrical stimulation for faecal incontinence in adults. *Cochrane Database Syst Rev* 2007; (3):CD001310.
14. Vonthein R, Heimerl T, Schwandner T et al. Electrical stimulation and biofeedback for the treatment of fecal incontinence: a systematic review. *Int J Colorectal Dis* 2013; 28(11):1567-77.
15. Schwandner T, Konig IR, Heimerl T et al. Triple target treatment (3T) is more effective than biofeedback alone for anal incontinence: the 3T-AI study. *Dis Colon Rectum* 2010; 53(7):1007-16.
16. Schwandner T, Hemmelmann C, Heimerl T et al. Triple-target treatment versus low-frequency electrostimulation for anal incontinence: a randomized, controlled trial. *Dtsch Arztebl Int* 2011; 108(39):653-60.
17. Norton C, Gibbs A, Kamm MA. Randomized, controlled trial of anal electrical stimulation for fecal incontinence. *Dis Colon Rectum* 2006; 49(2):190-6.
18. Yamanishi T, Homma Y, Nishizawa O et al. Multicenter, randomized, sham-controlled study on the efficacy of magnetic stimulation for women with urgency urinary incontinence. *Int J Urol* 2013.
19. Gilling PJ, Wilson LC, Westenberg AM et al. A double-blind randomized controlled trial of electromagnetic stimulation of the pelvic floor vs. sham therapy in the treatment of women with stress urinary incontinence. *BJU Int* 2009; 103(10):1386-90.
20. Wallis MC, Davies EA, Thalib L et al. Pelvic static magnetic stimulation to control urinary incontinence in older women: a randomized controlled trial. *Clin Med Res* 2012; 10(1):7-14.
21. Yokoyama T, Nishiguchi J, Watanabe T et al. Comparative study of effects of extracorporeal magnetic innervation versus electrical stimulation for urinary incontinence after radical prostatectomy. *Urology* 2004; 63(2):264-7.
22. Lucas MG, Bosch RJ, Burkhard FC et al. EAU guidelines on assessment and nonsurgical management of urinary incontinence. *Eur Urol* 2012; 62(6):1130-42.
23. National Institute for Health and Clinical Excellence (NICE). Clinical Guideline 40. Urinary incontinence: the management of urinary incontinence in women, October 2006. Available online at: www.nice.org.uk. Last accessed March, 2014.
24. National Institute for Health and Clinical Excellence (NICE). Faecal incontinence: the management of faecal incontinence in adults. 2007. Available online at: <http://www.nice.org.uk/CG49>. Last accessed March, 2014.
25. Centers for Medicare and Medicaid Services (CMS). Pub 100-03 Medicare National Coverage Determinations. Available online at: <http://www.cms.hhs.gov/transmittals/downloads/R48NCD.pdf>. Last accessed March, 2014.
26. Centers for Medicare and Medicaid Services National Coverage Determination (NCD) for Non-Implantable Pelvic Floor Electrical Stimulator (230.8), Implementation Date 6/19/2006.
27. National Government Services Local Coverage Article: Non-Implantable Pelvic Floor Electrical Stimulation (PFES) - National Coverage Determination (A6805), Article Revision Effective Date 06/01/2007.