

Policy #: 095

Original policy date: 3/1/02  
Revised date: 8/5/09

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#### Title

Iontophoresis

#### Description

Iontophoresis is a method of transdermal local drug delivery using electrical current. A charged ionic drug is placed on the skin with an electrode of the same charge, allowing direct current to drive the drug into the skin, where it is absorbed into the bloodstream and into deeper structures underlying the skin. Iontophoresis may take advantage of sweat ducts, sebaceous glands, hair follicles and imperfections in the skin to achieve penetration. It has been proposed for numerous uses, including delivery of local anesthetic before skin puncture or other painful skin procedures, local drug delivery for agents such as nonsteroidal anti-inflammatory drugs (NSAIDs) or corticosteroids for musculoskeletal inflammatory disorders. In the treatment of musculoskeletal disorders, iontophoresis is often offered in the physical medicine and rehabilitation setting. Iontophoresis has also been investigated for the treatment of hyperhidrosis of the hands and feet. The use of iontophoresis for increasing the production of sweat in order to analyze the sweat for chloride levels as a diagnostic test for cystic fibrosis is an accepted indication.

#### When services are covered for all Products (including Medicare HMO Blue, Medicare PPO Blue and Blue Medicare PFFS PlusRx)

We cover **iontophoresis** to administer local anesthesia prior to a venipuncture or dermatologic procedure.<sup>1</sup>

We cover **iontophoresis** of Fentanyl for the short term (i.e., less than 24 hours) management of acute postoperative pain in adult patients requiring opioid analgesia in a monitored facility.<sup>1</sup>

**NOTE:** Coverage of iontophoresis of Fentanyl for all Products, *effective 5/09*.

#### When services are not covered for all Products (including Medicare HMO Blue, Medicare PPO Blue and Blue Medicare PFFS PlusRx)

We do not cover **iontophoresis as a treatment for primary hyperhidrosis<sup>2</sup>**, because it is considered investigational as it does not meet our Medical Technology Assessment Guidelines, #350.

We do not cover **iontophoresis as a transdermal drug delivery technique for other medical indications<sup>1</sup>**, because it is considered investigational as it does not meet our Medical Technology Assessment Guidelines, #350.

Please see TMJ Disorders Guideline #608 for additional non-covered indications related to TMJ disorders.

#### Individual consideration

All our medical policies are written for the majority of people with a given condition. Each policy is based on medical science. For many of our medical policies, each individual's unique clinical circumstances may be considered in light of current scientific literature. For consideration of an individual patient, physicians may send relevant clinical information to:

**For services already billed**

Blue Cross Blue Shield of Massachusetts  
 Provider Appeals  
 P. O. Box 986065  
 Boston, MA 02298

**Prior to performance of service**

Blue Cross Blue Shield of Massachusetts  
 Case Creation/Medical Policy  
 One Enterprise Drive  
 Quincy, MA 02171  
 Tel: 1-800-327-6716  
 Fax: 1-888-641-5330

**Managed care guidelines**

Authorizations are not required.

**Indemnity and PPO guidelines**

Authorizations are not required.

**Coding information**

*Procedure codes are from current CPT, HCPCS Level II, Revenue Code, and/or ICD-9-CM manuals, as recommended by the American Medical Association, Centers for Medicare and Medicaid Services and American Hospital Associations. Blue Cross Blue Shield Association national codes may be developed when appropriate.*

*The following codes are included below for informational purposes. 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.*

**Iontophoresis**

- CPT code 97033, application of a modality to one or more areas; iontophoresis, each 15 minutes

**NOTE:** Please see TMJ Disorders Guideline #608 for information related to diagnosis editing on CPT code 97033.

In addition, the administration of a medication or drug may be reported with the appropriate HCPCS Level II code.

**Sweat Collection**

- CPT code 89230, sweat collection by iontophoresis

**Facility Coding**

- ICD-9 CM procedure code 99.27, iontophoresis

**Other information**

- For our Medical Technology Assessment Guidelines, see document # 350.

**Policy update history**

New Policy, effective 2/1/09. Updated 4/09 to add coverage of iontophoresis of Fentanyl for identified indications for all Products, effective 5/09; aligned coverage and non coverage of iontophoresis for Medicare Advantage products with Commercial products, effective 5/09. Reviewed 7/09 MPG - Orthopedics, Rehabilitation Medicine, and Rheumatology, no changes in coverage were made.

**Footnotes**

<sup>1</sup> Based upon BCBSA national policy 8.03.14 Iontophoresis as a Technique for Drug Delivery issued 9/07.

<sup>2</sup> Based upon BCBSA national policy 8.01 19 Treatment of Hyperhidrosis issued 2/08.

## References

### References for Footnote 1:

1. 2003 TEC Assessment: Iontophoresis for Medical Indications.
2. 2000 TEC Assessment: Iontophoresis for Medical Indications.
3. Chelly JE, Grass J, Houseman TW et al. The safety and efficacy of a fentanyl patient-controlled transdermal system for acute postoperative analgesia: a multicenter, placebo-controlled trial. *Anesth Analg* 2004; 98(2):427-33.
4. Viscusi ER, Reynolds L, Tait S et al. An iontophoretic fentanyl patient-activated analgesic delivery system for postoperative pain: a double-blind, placebo-controlled trial. *Anesth Analg* 2006; 102(1):188-94.
5. Hartrick CT, Bourne MH, Gargiulo K et al. Fentanyl iontophoretic transdermal system for acute-pain management after orthopedic surgery: a comparative study with morphine intravenous patient-controlled analgesia. *Reg Anesth Pain Med* 2006; 31(6):546-54.
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7. Grond S, Hall J, Spacek A et al. Iontophoretic transdermal system using fentanyl compared with patient-controlled intravenous analgesia using morphine for postoperative pain management. *Br J Anaesth* 2007; 98(6):806-15.
8. Vranken JH, Dijkgraaf MG, Kruis MR et al. Iontophoretic administration of S(+)-ketamine in patients with intractable central pain: a placebo-controlled trial. *Pain* 2005; 118(1-2):224-31.
9. Nirschl RP, Rodin DM, Ochiai DH et al. for the DEX-AHE-01-99 Study Group. Iontophoretic administration of dexamethasone sodium phosphate for acute epicondylitis. A randomized, double-blinded, placebo-controlled study. *Am J Sports Med* 2003; 31(2):189-95.
10. Neeter C, Thomee R, Silbernagel KG et al. Iontophoresis with or without dexamethazone in the treatment of acute Achilles tendon pain. *Scand J Med Sci Sports* 2003; 13(6):376-82.
11. Osborne HR, Allison GT. Treatment of plantar fasciitis by LowDye taping and iontophoresis: short term results of a double blinded, randomised, placebo controlled clinical trial of dexamethasone and acetic acid. *Br J Sports Med* 2006; 40(6):545-9.
12. Leduc BE, Caya J, Tremblay S et al. Treatment of calcifying tendinitis of the shoulder by acetic acid iontophoresis: a double-blind randomized controlled trial. *Arch Phys Med Rehabil* 2003; 84(10):1523-7.

### References for Footnote 2:

1. Hornberger J, Grimes K, Naumann M et al; Multi-Specialty Working Group on the Recognition, Diagnosis, and Treatment of Primary Focal Hyperhidrosis. Recognition, diagnosis, and treatment of primary focal hyperhidrosis. *J Am Acad Dermatol* 2004; 51(2):274-86.
2. Solish N, Bertucci V, Dansereau A et al; Canadian Hyperhidrosis Advisory Committee. A comprehensive approach to the recognition, diagnosis, and severity-based treatment of focal hyperhidrosis: recommendations of the Canadian Hyperhidrosis Advisory Committee. *Dermatol Surg* 2007; 33(8):908-23.
3. Levit F. Treatment of hyperhidrosis by tap water iontophoresis. *Cutis* 1980; 26(2):192-4.
4. 2003 TEC Assessments; Tab 3 (Iontophoresis for Medical Indications).

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