



NHS MEDICAL POLICY

IONTOPHORESIS (sweat test) Procedure 2014-004

Iontophoresis is the introduction of ionizable drugs through intact skin by the administration of continuous, direct electrical current into the tissues of the body. The sweat test by pilocarpine iontophoresis is the only practical and reliable laboratory test for confirmation of the diagnosis of cystic fibrosis (CF). Localized sweating is stimulated pharmacologically, the amount of sweat is measured, and sodium and chloride levels determined. An elevated chloride concentration suggests cystic fibrosis.

Sweat test by pilocarpine iontophoresis may be considered medically necessary for the diagnosis of cystic fibrosis when the ordering provider documents clinical suspicion of cystic fibrosis and 1 of the following is present:

1	Family history suggesting cystic fibrosis
2	Infant with positive CF newborn screening
3	Sibling of a patient with confirmed CF
4	Meconium ileus
5	Respiratory symptoms including, but not limited to: cough, wheezing or any breathing
6	Difficulty, recurrent respiratory infections, hyperinflation of the lung fields on chest
7	Radiograph, pulmonary function tests that are consistent with obstructive airway disease,
8	Chronic bronchitis, bronchiectasis, sinus disease or nasal polyposis
9	Digital clubbing

10	Failure to thrive or otherwise unexplained weight loss
11	Gastrointestinal symptoms including, but not limited to: distal intestinal obstructive
12	Syndrome, pancreatitis, pancreatic insufficiency, rectal prolapse, focal biliary cirrhosis
13	Reduced bone mineral content
14	Pathologic fracture
15	Kyphoscoliosis
16	Hypertrophic osteoarthropathy
17	Nodular skin lesions or purpura
18	Diabetes mellitus or glucose intolerance
19	Infertility
20	Otherwise unexplained recurrent venous thrombosis

SOURCES

UpToDate.com was accessed March 5, 2014.

1. Boat TF. Cystic fibrosis. In: Nelson Textbook of Pediatrics. 16th ed. RE Behrman, ed. Philadelphia, PA: W.B. Saunders; 2000:1319.
2. Cystic Fibrosis Foundation, Borowitz D, Parad RB, et al. Cystic Fibrosis Foundation practice guidelines for the management of infants with cystic fibrosis transmembrane conductance regulator-related metabolic syndrome during the first two years of life and beyond. J Pediatr 2009; 155:S106.
3. De Boeck K, Wilschanski M, Castellani C, et al. Cystic fibrosis: terminology and diagnostic algorithms. Thorax 2006; 61:627.
4. Farrell PM, Rosenstein BJ, White TB, et al. Guidelines for diagnosis of cystic fibrosis in newborns through older adults: Cystic Fibrosis Foundation consensus report. J Pediatr 2008; 153:S4.
5. Ratjen F, Döring G. Cystic fibrosis. Lancet 2003; 361:681.

6. Thompson MM, Marshik P. Cystic fibrosis. In: Conn's Current Therapy. 52nd ed. RE Rakel, ed. Philadelphia, PA: W.B. Saunders; 2000:176.

Code Reference (This may not be a comprehensive list of codes to apply to this policy.)

CPT 89230, 97033

POLICY HISTORY/REVISION INFORMATION

Date	Action/Description
02/26/2015	Reviewed by UM Committee
03/20/2015	Annual review and approval by UM Committee
12/16/2015	Annual review and approval by UM Committee
12/14/2016	Annual review and approval by UM Committee
12/13/2017	Annual review and approval by UM Committee
12/13/2018	Annual review and approval by UM Committee
12/12/2019	Annual review and approval by UM Committee
12/10/2020	Annual review and approval by UM Committee
12/10/2021	Annual review and approval by UM Committee
12/21/2022	Annual review and approval by UM Committee
12/20/2023	Annual review and approval by UM/QM Committee
12/23/2024	Annual review and approval by UM/QM Committee