

EFFECTIVE DATE: 12|01|2008

POLICY LAST UPDATED: 11|18|2014

OVERVIEW

Rhinomanometry, acoustic rhinometry, and optical rhinometry are techniques to objectively measure nasal patency. Several clinical applications are proposed including allergy testing, evaluation of obstructive sleep apnea, and patient assessment prior to nasal surgery.

PRIOR AUTHORIZATION

Not Applicable

POLICY STATEMENT

BlueCHiP for Medicare and Commercial

Rhinomanometry and acoustic/optical rhinometry are considered not medically necessary as there is insufficient peer-reviewed scientific literature that demonstrates that the procedure/service is effective.

MEDICAL CRITERIA

None

BACKGROUND

Rhinomanometry, acoustic rhinometry and optical rhinometry are techniques to objectively measure nasal patency. Several clinical applications are proposed including allergy testing, evaluation of obstructive sleep apnea and patient assessment prior to nasal surgery.

Nasal patency is a complex clinical issue that can involve mucosal, structural and psychological factors. The perception of nasal obstruction is subjective and does not always correlate with clinical examination of the nasal cavity, making it difficult to determine which therapy might be most likely to restore satisfactory nasal breathing. Therefore, procedures that objectively measure nasal patency have been sought. Three techniques that could potentially be useful in measuring nasal patency are as follows:

Rhinomanometry is a test of nasal function that measures air pressure and the rate of airflow in the nasal airway during respiration. These findings are used to calculate nasal airway resistance. Rhinomanometry is intended to be an objective quantification of nasal airway patency.

Acoustic rhinometry is a technique intended for assessment of the geometry of the nasal cavity and nasopharynx and for evaluating nasal obstruction. The technique is based on an analysis of sound waves reflected from the nasal cavities.

Optical rhinometry uses an emitter and a detector placed at opposite sides of the nose and can detect relative changes in nasal congestion by the change in transmitted light. This technique is based on the absorption of red/near-infrared light by hemoglobin and the endonasal swelling-associated increase in local blood volume.

Overall, the scientific evidence does not permit conclusions about the effect of rhinomanometry, acoustic rhinometry or optical rhinometry on health outcomes. To date, no studies have been published that evaluate the clinical utility of these tests. None of the studies identified have prospectively compared patient outcomes

with and without the use of one or more of these tests for any clinical condition. Therefore, the technologies are considered not medically necessary as there is no proven efficacy.

COVERAGE

Benefits may vary between groups/contracts. Please refer to the Evidence of Coverage or Subscriber Agreement for applicable "Services Not Medically Necessary" benefit.

CODING

BlueCHiP for Medicare and Commercial

The following code is considered not medically necessary:

92512

RELATED POLICIES

None

PUBLISHED

Provider Update	Jan 2015
Provider Update	Aug 2013
Provider Update	Aug 2012
Provider Update	Dec 2011
Provider Update	Mar 2011
Provider Update	Aug 2009
Provider Update	Sep 2008
Policy Update	Jul 2007

REFERENCES

1. Larivee YMD, Leon Z BS, Salas-Prato M PhD, Ganeva E MD, Desrosiers M MD. "Evaluation of the Nasal Response to Histamine Provocation with Acoustic Rhinometry." *Journal of Otolaryngology*; November 2001; 30:6:319-323.
2. Andre RF, Vuyk HD, Ahmed A et al. Correlation between subjective and objective evaluation of the nasal airway. A systematic review of the highest level of evidence. *Clin Otolaryngol* 2009; 34(6):518-25.
3. Canakcioglu S, Tahamiler R, Saritzali G et al. Nasal patency by rhinomanometry in patients with sensation of nasal obstruction. *Am J Rhinol Allergy* 2009; 23(3):300-2.
4. Pirila T, Tikanto J. Acoustic rhinometry and rhinomanometry in the preoperative screening of septal surgery patients. *Am J Rhinol Allergy* 2009; 23(6): 605-9.
5. Schumacher MJ. Nasal congestion and airway obstruction: the validity of available objective and subjective measures. *Curr Allergy Asthma Rep* 2002; 2(3):245-51.
6. Wilson AM, Sims EJ, Orr LC et al. Effects of topical corticosteroid and combined mediator blockade on domiciliary and laboratory measurement of nasal function in seasonal allergic rhinitis. *Ann Allergy Asthma Immunol* 2001; 87(4):344-9.
7. Ellegard EK, Hellgren M, Karlsson NG. Fluticasone propionate aqueous nasal spray in pregnancy rhinitis. *Clin Otolaryngol* 2001; 26(5):394-400.

8. Rhee CS, Kim DY, Won TB et al. Changes of nasal function after temperature-controlled radiofrequency tissue volume reduction for the turbinate. *Laryngoscope* 2001; 111(1):153-8.
9. Suzina AH, Hamzah M, Samsudin AR. Objective assessment of nasal resistance in patients with nasal disease. *J Laryngol Otol* 2003; 117(8):609-13.
10. Numminen J, Dastidar P, Heinonen T et al. Reliability of acoustic rhinometry. *Respir Med* 2003; 97(4):421-7.

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