The Safety of Flexible Endoscopic Evaluation of Swallowing With Sensory Testing in an Outpatient Otolaryngology Setting

Manderly A. Cohen, MS, CCC-SLP; Michael Setzen, MD; Philip W. Perlman, MD; Michael Ditkoff, MD; Kenneth F. Mattucci, MD; Joel Guss

Objective:

To study the safety of flexible endoscopic evaluation of swallowing with sensory testing in a private otolaryngology office setting.

Study Design:

Five parameters were prospectively evaluated. These included airway compromise, epistaxis, change in heart rate, level of discomfort, and patient's willingness to repeat the examination in the future.

Methods:

All persons undergoing flexible endoscopic evaluation of swallowing with sensory testing between July 1, 1999, and June 30, 2001, were prospectively evaluated. A flexible fiberoptic endoscope with a specially designed air port channel was passed transnasally (without topical anesthesia or nasal constriction) into the more patent nostril. Nasopharyngeal and laryngeal anatomy were first evaluated. Laryngopharyngeal sensory and motor function were then assessed, followed by a comprehensive swallowing evaluation. Five test parameters were examined during each study. Descriptive statistics were calculated.

Results:

Three hundred forty-nine consecutive examinations in 305 adult patients with dysphagia were performed during the study period. Mild epistaxis occurred in four patients (1.1%). There were no episodes of airway obstruction or laryngospasm. There was no statistically significant difference between the average pretest and post-test heart rates; no patients became symptomatically bradycardic or tachycardic. The discomfort ratings were as follows: 44 patients (12.6%) rated the overall discomfort of the test as none, 169 (48.4%) thought it was mild, 110 (31.5%) described moderate discomfort, and 26 (7.5%) said it was severe. Three hundred

forty-two (98%) of the patients would repeat the test in the future; seven patients (2%) said that they would not.

Conclusions:

Flexible endoscopic evaluation of swallowing with sensory testing is a safe, well-tolerated procedure to objectively evaluate patients with dysphagia when performed by an experienced speech-language pathologist with an otolaryngologist in attendance in an outpatient office setting.

Key Words: Flexible endoscopy; dysphagia; swallowing; flexible endoscopic evaluation of swallowing with sensory testing; safety

From North Shore Otolaryngology Associates (*m.a.c.*, *m.s.*, *p.w.p.*, *m.d.*, *k.f.m.*) and the Department of Otolaryngology-Head and Neck Surgery (*m.s.*, *p.w.p.*, *m.d.*, *k.f.m.*), North Shore University Hospital, Manhasset, New York; and Columbia University College of Physicians and Surgeons (j.g.), New York, NY, U.S.A.

Editor's Note: This Manuscript was accepted for publication August 27, 2002.

Send Correspondence to Michael Setzen, MD, 333 East Shore Road, Manhasset, NY 11030, U.S.A. E-mail: msmdent@aol.com

For more information <u>please email us</u> info@michaelsetzen.com