

Public release date: 1-Jan-2010

Contact: Jessica Mikulski newsroom@entnet.org

703-535-3762

American Academy of Otolaryngology -- Head and Neck Surgery

## Chronic sinusitis patients experience improved quality of life after endoscopic sinus surgery

New research from Otolaryngology -- Head and Neck Surgery

Alexandria, VA – Upwards of 76 percent of patients with chronic rhinosinusitis (CRS) experienced significant quality of life (QOL) improvements after undergoing endoscopic sinus surgery (ESS), according to new research in the January 2010 issue of Otolaryngology – Head and Neck Surgery.

CRS is a debilitating form of sinusitis that can lead to significant physical symptoms as well as substantial functional and emotional impairment. Symptoms of CRS include stuffy nose, sinus pain and pressure, headache, and sneezing, and CRS is often confused with the cold, flu, or allergies. According to the National Health Interview Survey, CRS affects 14-16 percent of the U.S. population and has significant socioeconomic implications, with annual direct costs of \$4.3 billion. Also, patients with sinusitis score lower in QOL measures of bodily pain and social functioning than patients with congestive heart failure, angina, chronic obstructive pulmonary disease, or back pain. Due to the chronic nature of the disease, and the relatively poor response of some patients to initial medical therapies, patients with CRS undergo 500,000 surgical procedures annually, with the primary goal of improving QOL.

The prospective, multi-institutional cohort study analyzed a total 302 patients with CRS from three medical centers between July 2004 and December 2008 and followed the patients for approximately one and a half years postoperatively. The goal of the study was to report outcomes of ESS using prospective, multi-institutional data from a large cohort and validated disease-specific and general health-related QOL instruments. In addition, preoperative patient factors were evaluated for their ability to predict clinically significant outcomes so that surgeons can appropriately counsel patients and optimize surgical case selection.

Results of the study showed 72 -76 percent of patients with CRS and poor baseline QOL experienced clinically significant improvement in disease-specific QOL outcomes after ESS.

Clinical factors, including asthma, aspirin intolerance, and prior sinus surgery, as well as preoperative diagnostic testing were found to be important potential predictors of outcomes. However, few of these variables were significant predictors of improvement when multiple risk factors were accounted for in the predictive model. Ultimately, primary ESS patients were twice as likely to improve after surgery as patients undergoing revision ESS, although a baseline measure of disease severity (endoscopy score) was worse in the revision ESS group.

The authors note that although several previous studies have reported improvement in the large majority of patients undergoing ESS, these have been limited by retrospective data collection or unvalidated outcomes. Also, some prospective studies have reported improvement in mean QOL and symptom scores following ESS, but they did not define the proportion of patients that improved. They were largely single institution results, or had limited sample sizes for analysis.

Developed in the 1950s, ESS involves the insertion of the endoscope, a thin fiber-optic tube, into the nose for a direct visual examination of the openings into the sinuses. With state of the art micro-telescopes and instruments, abnormal and obstructive tissues are then removed. Some advantages of the procedure are that the surgery is less extensive, there is often less removal of normal tissues, and it can frequently be performed on an outpatient basis.

###

Otolaryngology – Head and Neck Surgery is the official scientific journal of the American Academy of Otolaryngology – Head and Neck Surgery Foundation (AAO-HNSF). The study's authors are Timothy L. Smith, MD, MPH, Jamie R. Litvack, MD, Peter H. Hwang, MD, Todd A. Loehrl, MD, Jess C. Mace, MPH, Karen J. Fong, MD, and Kenneth E. James, PhD.

Reporters who wish to obtain a copy of the article should contact Jessica Mikulski at 1-703-535-3762, or at <a href="mailto:newsroom@entnet.org">newsroom@entnet.org</a>.

## **About the AAO-HNS**

The American Academy of Otolaryngology – Head and Neck Surgery (www.entnet.org), one of the oldest medical associations in the nation, represents nearly 12,000 physicians and allied health professionals who specialize in the diagnosis and treatment of disorders of the ears, nose, throat, and related structures of the head and neck. The Academy serves its members by facilitating the advancement of the science and art of medicine related to otolaryngology and by



representing the specialty in governmental and socioeconomic issues. The organization's
vision: "Empowering otolaryngologist-head and neck surgeons to deliver the best patient care."