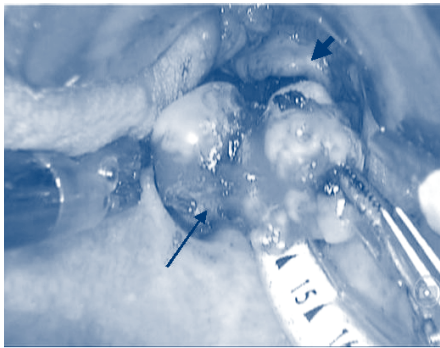
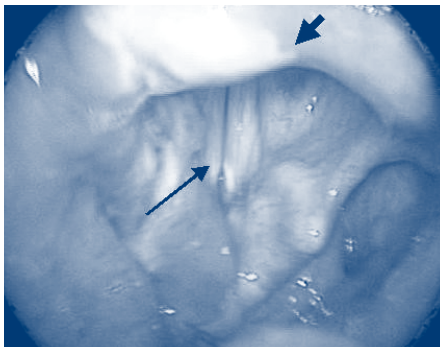


Transoral Robotic Surgery: New Developments in Head and Neck Cancer



TORS laryngeal schwannoma resection.



One week later.

“TORS permits us to overcome many of the limitations encountered during complicated surgeries. For patients having surgery for head and neck lesions, this may mean reduced blood loss, diminished post-operative pain and a faster return to normal functioning capacity.”

– GREGORY WEINSTEIN, MD, FACS
CO-DIRECTOR, THE PENN CENTER
FOR HEAD AND NECK CANCER

At the vanguard of a new age in surgical technology, surgeons at Penn's division of head and neck cancer surgery have developed a novel robotic-assisted surgical approach to surgery for cancers and benign lesions of the head and neck. Called transoral robotic surgery (TORS), this technique has been used to perform more than 100 complicated surgeries since its introduction at Penn in 2006.

TORS employs sophisticated robotic “hands” capable of incising, suturing, and other delicate maneuvers. Manipulated by surgeons from a computer console, the robotic hands are attached to a pair of slender arms that permit enhanced access to most surgical sites. Consequently, TORS procedures are minimally invasive, sparing many patients the trauma, extended recovery and deformity often associated with head and neck surgeries.

Case Study

Mrs. G, a 73-year-old female, came to the Penn Center for Head and Neck Surgery from Maryland for resection of a laryngeal schwannoma. This rare neoplasm had been observed as a small nodule in the supraglottis during prior successful surgery for thyroid cancer, but was not removed at that time. Two years later, Mrs. G was referred to a head and neck surgeon near her home for evaluation of severe airway occlusion attended by dysphagia, dysphonia and obstructive apnea. Laryngoscopy now revealed a large (2.5 cm) tumor proximal to the larynx. Considering the tumor's size and location, the surgeon recommended a procedure performed through neck incisions, requiring a tracheostomy. Despite a poor prognosis, Mrs. G did not want to undergo another major surgery, prompting her local otorhinolaryngologist to contact Penn.

Mrs. G had transoral robotic surgery at Penn several days afterward. The surgery was completed in 12 minutes, following a brief prelude to set up the robotic arms and obtain exposure to the tumor through the throat. Mrs. G's vocal cords were spared; no tracheostomy was required. She returned home two days after surgery, and is enjoying an uneventful recovery. She describes her quality of life as “excellent”.



Clinical Trials

The Penn Center for Head and Neck Surgery is the first in the world to have an Institutional Review Board-approved study on the effectiveness of transoral robotic surgery for oral and laryngopharyngeal benign and malignant lesions. This is the largest and most comprehensive study of the technology on record.

The Penn Center for Head and Neck Cancer

The faculty of the division of head and neck cancer surgery at Penn Otorhinolaryngology are leaders in the field in patient care, surgical innovation, and clinical and laboratory research.

TransOral Robotic Surgery

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Gregory Weinstein, MD, FACS

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Eric Sherman, MD

Assistant Professor

Marcia Brose, MD, PhD

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Robert Lustig, MD

Clinical Associate Professor

Harry Quon, MD

Clinical Associate Professor

Access

Patient appointments are available at:

Hospital of the University of
Pennsylvania

3400 Spruce Street

Silverstein Pavilion, 5th Floor

Philadelphia, PA 19104

Pennsylvania Hospital

811 Spruce Street

Philadelphia, PA 19107

To refer a patient and/or consult
with a doctor:

Visit <http://www.entconsult.org/>

and click on Make an Appointment

or call 1-800-789-PENN (7366)



Hospital of the University of Pennsylvania
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