New robotic head and neck cancer surgery preserves speech, without scarring

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TransOral Robotic Surgery, in progress, at Henry Ford Hospital in Detroit. The surgery, performed by Tamer A. Ghanem, M.D., Ph.D., offers patients a new option to remove certain head and neck cancer tumors without visible scarring, while preserving speech and the ability to eat. Credit: Henry Ford Hospital

An incisionless robotic surgical procedure is offering patients a new option to remove certain head and neck cancer tumors without visible scarring, while preserving speech and the ability to eat.

Henry Ford Hospital in Detroit is among the first in the country to perform TransOral Robotic Surgery (TORS) using the da Vinci® Surgical System. Unlike traditional surgical approaches to head and neck cancer, TORS patients are able to return to their normal lives only a few days after surgery without significant pain and disfigurement.

"TORS offers shorter post-operative recovery than standard open surgical approaches, giving patients the opportunity to quickly and successfully return to their normal lives," says Tamer A. Ghanem, M.D., Ph.D., director of Head and Neck Oncology and Reconstructive Surgery Division in the Department of Otolaryngology-Head & Neck Surgery at Henry Ford Hospital.

"TORS allows surgeons to completely remove tumors of the head and neck while preserving speech, swallowing, and other key quality of life issues such as eating. There also is no visible scaring or disfigurement."

Led by Dr. Ghanem, Henry Ford Hospital has performed more than a dozen TORS procedures since it was approved in January by the U.S. Food and Drug Administration to remove malignant and benign tumors of the mouth, tongue, tonsils, and parts of the throat.

Prior to TORS, patients would traditionally begin treatment with radiation therapy, or a combination of chemotherapy and radiation therapy, depending on the stage of their cancer. Side effects of radiation - dry mouth, loss of taste and difficulty swallowing - can potentially be avoided with TORS

Traditional surgery has side effects as well. It requires a long incision be made across the lip and jaw to access the tumor. This approach can results in significant swelling, longer post-operative recovery, damage to surrounding structures, and speech and swallowing problems.

With TORS, surgeons can access tumors through the mouth using the slender operating arms of the da Vinci, thus not requiring an open skin incision.

"Surgeons operate with greater precision and control using the TORS approach," says Dr. Ghanem, "minimizing the pain, and reducing the

risk of possible nerve and tissue damage associated with large incisions."

Some of TORS's other benefits include:

- Significantly less blood loss
- No visible scarring
- Possibility of avoiding a tracheotomy
- Minimization or elimination of need for chemoradiation therapy
- Fewer complications and shorter hospital stay
- Faster recovery, return to normal speech and swallowing
- Equivalent cancer control to radiation therapy

Patients with early stage tonsil and base of tongue cancers may not need to receive radiation therapy following TORS, depending on the final tumor margins and pathological characteristics of the tumor.

In addition to TORS, Dr. Ghanem specializes in complex head and neck oncology cases, offering both cancer resection as well as reconstructive surgery using microvascular techniques (taking tissue from one part of the body and transplanting it to the head and neck areas to improve function and esthetics). In addition, he performs thyroid, parathyroid, and salivary gland surgery, reconstruction after Mohs procedures and robotic-assisted thyroidectomy, in which the incision is made in the arm pit instead of the neck to conceal it.

Provided by Henry Ford Health System