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Robotic surgery proves successful, less invasive way to treat HPV-related oral cancer

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Over the past few decades, doctors have noted a surprising trend in cancer of the tonsils and base of the tongue. Though oral cancer previously appeared predominantly in elderly patients with a history of tobacco and alcohol use, it's increasing in younger patients: 30- to 50-year-old nonsmokers with the human papillomavirus (HPV). Fortunately, the newer form of cancer tends to be less aggressive, and the latest approach to treating the tumors can avoid the debilitating consequences of open neck surgery or extensive radiation. Robotic surgery conducted through patients' mouths provides excellent results in removing squamous cell carcinoma at the back of the throat, especially in patients with HPV, a Mayo Clinic study published in the March issue of *Mayo Clinic Proceedings* found.

"We were surprised that the cancer cure results were even better than the traditional treatments that we have been doing, but that is probably almost as much of a matter that these cancers are HPV-mediated for the most part, and they respond much better to treatment," says author Eric Moore, M.D., a head and neck surgeon at Mayo Clinic in Rochester. "Importantly, the treatment preserved patients' ability to swallow and their speech performance was excellent."

Dr. Moore and his team followed 66 patients with oropharyngeal cancer who underwent transoral robotic surgery with the da Vinci robotic surgical system. Every few months, the patients had imaging studies, scans and exams to determine if cancer was recurring. After two years, researchers found that patients' survival rate was greater than 92 percent,

as good as rates for some other surgical and nonsurgical treatments for oropharyngeal cancer.

Because traditional surgery techniques to remove throat tumors can be traumatic, requiring cutting and reconstructing the jawbone, neck and tongue, researchers were also interested in patients' healing after robotic surgery.

"We found that with transoral robotic surgery 96 percent of patients could swallow a normal diet within three weeks of treatment," Dr. Moore says. Less than 4 percent required a gastrostomy tube, which enables food to bypass the throat.

The study provides preliminary data showing the robotic surgery is a viable treatment option, Dr. Moore says. Continuing research involving multiple medical centers will investigate transoral robotic surgery in a larger population of patients with oropharyngeal cancer.

More information: www.mayoclinicproceedings.com/

Provided by Mayo Clinic