

Transoral robotic surgery for oropharyngeal cancer

Findings from a retrospective, stage-matched cohort study have shown that transoral robotic surgery for treatment of patients with oropharyngeal squamous cell carcinoma provides similar survival with significantly less morbidity than treatment with traditional non-surgical therapy such as radiotherapy or chemoradiotherapy.

In the study by Arun Sharma and colleagues (Southern Illinois University School of Medicine, Springfield, IL, USA), previously untreated patients with oropharyngeal cancer who underwent transoral robotic surgery (n=39) were matched by tumour stage with up to three patients who received non-surgical treatment (n=88). Overall survival could not be analysed because too few events occurred, but disease-free survival did not significantly differ between the two groups after multivariable analysis (hazard ratio 0.22, 95% CI 0.04–1.36;

p=0.10). However, compared with non-surgical treatment, a significantly lower percentage of patients given transoral robotic surgery-based therapy had post-treatment swallowing dysfunction that necessitated placement of a gastrostomy tube (74 [84%] of 88 vs 13 [33%] of 39, multivariable relative risk 0.43, 95% CI 0.27–0.68; p<0.001).

Lead investigator Sharma said, "This study adds to the growing body of evidence that supports the use of transoral robotic surgery for oropharyngeal cancer. From prior work in this [patient] group, one of the strongest predictors of quality of life was whether they have a feeding tube or not following treatment. Transoral robotic surgery is an option for improved swallowing function and better overall quality of life."

Eric Genden (Icahn School of Medicine at Mount Sinai, New York, NY, USA) commented, "This study demonstrates

findings that probably most of us who treat these patients already know. For those of us who use transoral robotic surgery, we have observed that there is a significant decrease in use of feeding tubes." He added, "Because these patients are generally younger than patients with tobacco-associated disease, we have a responsibility to focus on long-term quality of life. Being able to socialise, eat, and swallow normally are important aspects of quality of life."

A number of related studies are currently underway, including a phase 2 clinical trial in the USA (NCT01898494) that is studying the effect of deintensified adjuvant treatment following transoral surgery on survival, swallowing function, and quality of life in patients with advanced, human papillomavirus-positive, oropharyngeal cancer.

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For the study by Arun Sharma and colleagues see

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