A Prospective Evaluation of Dysphagia after Transoral Robotic Surgery for Squamous Cell Carcinoma of the Oropharynx

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ABSTRACT

OBJECTIVES: Dysphagia is common in the perioperative period after transoral robotic surgery (TORS) and has been inadequately characterized. Our primary objective in this study is to prospectively characterize short-term swallowing outcomes after TORS for OPSCC.

METHODS: Patients undergoing TORS for OPSCC were prospectively enrolled into this study between the dates of 6/20/2014 and 11/30/2015. Exclusion criteria were a history of previous TORS, repeat TORS within one month after enrollment, TORS for non-malignancy, a procedure on a non-oropharyngeal aerodigestive subsite, a contraindication to swallowing evaluation, or incomplete data. The Eating Assessment Tool 10 (EAT-10), a 10-item validated questionnaire measuring swallowing quality of life, was administered on post-operative day (POD) 1, POD 7, and POD 30.

RESULTS: The mean EAT-10 score (0-40) on POD 1 was 21.5 (range 0-37), on POD 7 was 27.5 (range 14-45), and on POD 30 was 12.3 (range 1-33). EAT-10 scores were worse at POD 7 (p=0.002) and better on POD 30 (p=0.001) as compared with initial evaluation. At 1 month 53/45 (14.3%) patients had normal EAT-10 scores. Mean weights (lbs) decreased significantly over the month (204.6 vs. 194.7, p<0.001).

CONCLUSIONS: Most patients who undergo TORS experience dysphagia for at least the first month after surgery. Patients can be counseled that dysphagia will worsen by post-operative day 7 then improve but likely not resolve by one month. Swallowing evaluation and therapy should be considered routine in this cohort of patients.

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