## World Academy of Science, Engineering and Technology International Journal of Biomedical and Biological Engineering Vol:15, No:10, 2021

## Swallowing Outcomes in Supraglottic Cancer Patients after Trans-Oral Robotic Surgery (TORS) Provided with Early Dysphagia Management Using Standardized Functional and Objective Measures

Authors: Hitesh Gupta, Surender Dabas

Abstract: TORS is increasingly gaining widespread use and has been explored as minimally invasive surgery for the treatment of supraglottic cancer (SGC). Being a central critical role of Supraglottis in deglutition, swallowing outcomes post TORS remain a most important factor. Available published studies show inconsistent swallowing outcomes and are deficient in standardized outcome measures, description of swallowing recovery and rehabilitation. So, the objective of this study is to find out swallowing outcomes in SGC patients after TORS provided with early dysphagia management using standardized measures. Prospectively 16 patients were recruited in the study who underwent TORS for primary tumor of Supraglottis, involving one or more sub-sites or invading to sites other than Supraglottis at the BLK Super Specialty Hospital, New Delhi from March 2019 to June 2020. All patients were evaluated for dysphagia with subsequent swallowing rehabilitation on post operative day 3 in the hospital or at the time of discharge, whichever was earlier. Functional oral intake scale (FOIS) and penetration-aspiration score (PAS) were used as outcome measures to quantify swallowing recovery at one month and six month post operatively. Post TORS, patients achieved functional swallow in less than one month, where resection was limited to Supraglottis, while the recovery was delayed in patients with extended resection to tongue base or hypopharynx. Overall, out of Total 16 cases including all supraglottis sub-catagories, 13 (81%) could remove their NG tube (FOIS ≥5 and PAS=1) within 6 months. In which 8 cases(62%) achieved functional swallow in less than one month. Swallowing outcomes post TORS supraglottic laryngectomy are favorable if provided with early dysphagia management (or swallowing rehabilitation).

**Keywords**: dysphagia, supraglottic cancer, swallowing, TORS

Conference Title: ICHNO 2021: International Conference on Head and Neck Oncology

Conference Location: Barcelona, Spain Conference Dates: October 25-26, 2021