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The Functional Outcomes of Transoral Robotic Surgery for Head and Neck Cancer Patients at a Kent Based Hospital.

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Abstract

Background: The pathos trial is an ongoing trial to determine optimum adjuvant therapy following transoral robotic surgery (TORS) for treatment of oropharyngeal squamous cell carcinomas. Specifically, the trial investigates how de-escalating adjuvant therapy will affect patient function. There is currently limited literature on functional outcomes of transoral robotic surgery. Current literature measure function based on crude metrics such as the requirement for nasogastric (NG) tubes. With the introduction of questionnaires which can quantify patient function in the follow up after TORS for head and neck cancer treatment, this project aims to develop current knowledge on the functional outcomes following TORS.

Methods: Routine follow up of head and neck cancer patients treated with TORS includes the following questionnaires: MD Anderson Dysphagia Inventory, European Organisation for the Research and Treatment of Cancer (EORTC) C30 questionnaire, EORTC HN35 questionnaire and Voice Handicap Index (VHI). The patients were also asked to rate their daily pain on a scale of 1-10. Patients undergoing TORS for curative treatment of a head and neck cancer at the trust in which the project took place were approached following their surgery to confirm whether they consent their data to be used in the project regarding consent to use their data in the project. The data used includes scores of their questionnaires at the following intervals: preoperative period, immediate postoperative period, 2 weeks after surgery, 1 month after surgery, 3 months after surgery and 6 months after surgery. The gathered data would then be plotted to trend how participant functional burden changed over time following TORS.

Results: At baseline investigation, 86.7% of participants reported a MD Anderson score of 90 – 100, suggesting significant swallowing complications caused by their disease. By the 6-month post TORS investigation, only 20% of participants had maintained a score between 90 – 100. The most abundant intervals at 6 months post TORS were 20 – 29 and 50 – 59, each holding 30% of the recorded sample size. 66.7% of participants reported an EORTC C30 score of 40 – 49 at baseline, which increased to 80% of participants at 6 months. 40% of the sample recorded a score of 30 – 39 on the EORTC HN35 questionnaire at baseline,

however, at the 6 month follow up 50% of participants had a HN35 score of between 40 – 49 suggesting a reduction in quality of life when specified to the head and neck region. VHI and pain scores showed an initial surge (deterioration in function) following TORS, however by the 6 month follow up mean VHI scores and mean pain scores had fallen below baseline levels (improvement in function).

Conclusions: The results of the investigation may suggest the functional outcomes following TORS are better than the initial symptomatic burden of cancer. Functional outcomes could have been dramatically influenced by adjuvant therapy regime, so it would be beneficial to stratify future investigations based on adjuvant therapy intensity. Unfortunately, due to numerous factors such as poor patient engagement with follow-up, no significant conclusion can be made from the project and so further investigation is warranted.

Keywords: TORS | Swallowing | QoL | Cancer

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