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Citation: Lee, M. T., Govender, R., Roy, P. J., Vaz, F. & Hilari, K. (2020). Factors affecting swallowing outcomes after total laryngectomy: Participant self-report using the swallowing outcomes after laryngectomy questionnaire. *Head Neck*, 42(8), pp. 1963-1969. doi: 10.1002/hed.26132

This is the accepted version of the paper.

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Link to published version: <https://doi.org/10.1002/hed.26132>

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**FACTORS AFFECTING SWALLOWING OUTCOMES AFTER TOTAL LARYNGECTOMY:
PARTICIPANT SELF-REPORT USING THE SOAL (SWALLOWING OUTCOMES AFTER
LARYNGECTOMY) QUESTIONNAIRE**

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Running title: Predictors of patient-reported swallowing outcomes after laryngectomy

Keywords: swallowing, dysphagia, patient-reported outcome measure, SOAL, laryngectomy

Abstract

Background: Little is known about what factors affect patient-reported swallowing outcome after total laryngectomy. We explored whether patient demographics, surgical variables, use of adjuvant treatment and time since surgery were associated with patient-reported swallowing outcome.

Methods: Cross-sectional study of laryngectomees in eight UK hospitals. Demographic, treatment and surgical variables were drawn from medical notes. The Swallowing Outcomes After Laryngectomy (SOAL) questionnaire captured perceived swallowing outcome.

Results: 221 participants had complete data on treatment-related variables. In regression analysis, having a free jejunum flap repair and requiring chemo-radiation were the only two variables that added significantly to the model of worse self-reported swallowing outcome (R^2 adjusted=.23, $p<.001$).

Conclusion: The SOAL is a sensitive measure of self-reported swallowing outcome after laryngectomy. Type of surgical closure and the type of adjuvant treatment influenced the swallowing outcome reported by patients. Changes in perceived swallowing function need to be routinely evaluated to inform clinical decision-making and intervention.