

# Nature, Severity and Impact of Chronic Dysphagia Following Curative Oesophageal Resection : Preliminary Findings

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## Background

- Survivors of curative oesophageal resection for oesophageal cancer present with and complain of oropharyngeal and oesophageal dysphagia for many years following surgery (Yuen et al, 2015, Kauppila et al, 2019, Low et al, 2019).
- Few studies have explored the presentation of oropharyngeal dysphagia throughout survivorship or its impact on swallow-related quality of life (QoL).

## Objectives

This cross-sectional prospective observational study aimed to determine:

- the nature, severity and QoL impact of transhiatal oesophagectomy (THO), 2 stage and 3 stage surgeries on swallowing at least 12 months post-operatively
- relevant surgical and clinical associations.

## Materials and Methods

Thirty adults post curative oesophageal resection (THO /2 stage/3 stage) were recruited between November 2021 and March 2022 from St. James' Hospital.

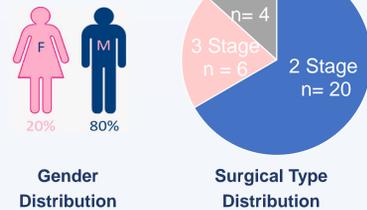


Table 1. Patient Demographics

	Overall Total	Cervical Anastomosis		
		Thoracic Anastomosis	3 stage	THO
Surgical approach	NA	2 stage	3 stage	THO
Age mean (years)	64.8 +/- 9.661	64.8 +/- 8.794	61.5 +/- 23.39	69.75 +/- 10.112
Time since op (months)	38.4 +/- 19.335	28.9 +/- 14.447	54 +/- 14.588	62.75 +/- 8.18
Days in hospital post surgery	19.67 +/- 13.38	6 +/- 21.83	19.8 +/- 15.137	15.75 +/- 4.272

### Statistical Analysis

Bivariate analyses (Spearman's tests) were conducted to investigate associations between the surgical approach, time since surgery, presence of dysphagia, altered diet, reflux, and QoL.

### Outcome Measures:

A Public and Patient Involvement Committee assisted with selecting outcome measures. See Fig 1:

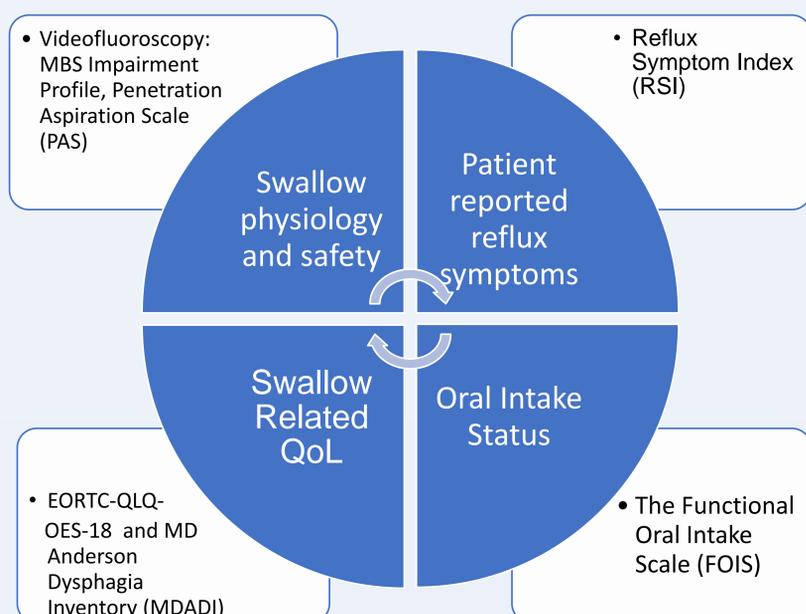


Fig 1 Outcome Measures

## Preliminary Results

### MBS Impairment Profile and PAS Results



	Thoracic Anastomosis	Cervical Anastomosis		p-value
	2 stage (n=20)	3 stage (n=6)	THO (n=4)	
RSI	8.2 +/- 8.983	7 +/- 9.612	16.75 +/- 10.3	p = .218
FOIS	6.5 +/- 0.827	6.5 +/- 0.837	6.0 +/- 0	P = .501
EORTC-QLQ-OES-18	36.68 +/- 9.399	35.67 +/- 12.111	40.5 +/- 4.655	p = .718
MDADI Composite	77.34 +/- 16.799	78.947 +/- 15.34	64.21 +/- 17.3	P = .328

Table 3 Clinical assessment and QoL Results

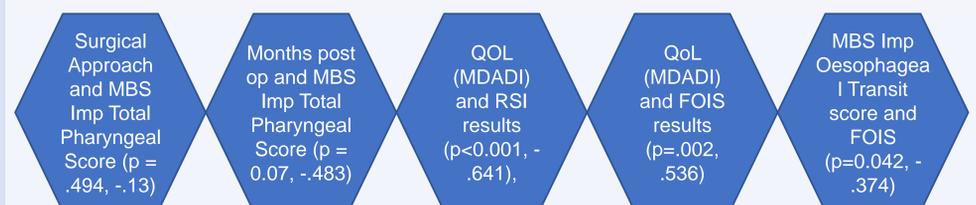


Fig 2 Correlation Results (Objective 2)

## Conclusions

All participants presented with altered oropharyngeal swallowing. Airway protection was relatively intact.

The majority of participants, who were a mean of 38.4 months post surgery, continue avoiding certain food consistencies because of their swallowing difficulty.

Thirty seven % (n = 11) of participants reported symptoms indicative of laryngo-pharyngeal reflux (Lechien et al 2020).

Swallow-related QoL is mild-moderately impaired. There was a significant association between impaired QoL scores (MDADI) and reflux results (RSI), and between impaired QoL (MDADI) and an altered diet (FOIS).

Months post surgery was significantly associated with improved pharyngeal dysphagia scores.

Further research is warranted to better understand the nature, severity, impact and treatment of dysphagia in this population.

## References

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- Kauppila, J.H., A. Johar, and P. Lagergren, Postoperative Complications and Health-related Quality of Life 10 Years After Esophageal Cancer Surgery. *Ann Surg*, 2020. 271(2): p. 311-316- Low, D.E., et al., *Guidelines for Perioperative Care in Esophagectomy: Enhanced Recovery After Surgery (ERAS((R))) Society Recommendations*. *World J Surg*, 2019. 43(2): p. 299-330.
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