



AB068. 23. Implementation of a minimally invasive oesophagectomy programme: Results from 135 consecutive cases

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Background: Open Ivor-Lewis oesophagectomy has traditionally been the standard treatment for resectable oesophageal cancer, and is associated with significant postoperative morbidity. Minimally invasive oesophagectomy is increasingly adopted, with reduced pulmonary complications and improved quality-of-life in survivorship.

Methods: Consecutive patients undergoing total minimally invasive Ivor-Lewis oesophagectomy for oesophageal cancer from 2011–2017 were prospectively studied. Neoadjuvant therapy was utilised for \geq cT2 and/or \geq cN1 disease. All patients underwent radical abdominothoracic *en bloc* oesophagectomy with two-field lymphadenectomy and high intrathoracic end-to-side circular stapled oesophagogastric anastomosis, and a postoperative ERAS protocol was

utilised. Benchmarks were defined from published series and centred linear weighted moving average used to study changes in outcome over time.

Results: A total of 135 patients (age 61.2 ± 9.1 years; adenocarcinoma, 82%) were studied. 76% of patients received neoadjuvant therapy (chemotherapy 13%, chemoradiation 63%). One patient (0.7%) required conversion to an open procedure. 94.1% underwent an R0 resection. Median inpatient and critical care lengths of stay were 8 (range, 6–94) and 3 (range, 1–76) days, respectively, with a comprehensive complication index (CCI) of 15.3 ± 22.4 . Grade II, III and IV morbidity occurred in 17.0%, 15.6% and 2.9%, with pneumonia, atrial fibrillation and anastomotic leak in 23.7%, 8.1% and 3.7% of patients. Thirty-day/in-hospital mortality and 90-day mortality were 3.0% and 3.7%, respectively. CCI reduced over time ($P=0.04$) with a learning curve of 30 cases. A textbook outcome occurred in 64% of patients and was stable throughout the series ($P=0.61$).

Conclusions: Implementation of a minimally invasive oesophagectomy programme was successful, feasible and safe. Perioperative and oncologic outcomes compared favourably with published benchmarks.

Keywords: Enhanced recovery; minimally invasive oesophagectomy; morbidity; mortality; oesophagectomy

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