



## AB024. 53. Minimally invasive surgical management of spontaneous oesophageal perforation (Boerhaave's syndrome)

Jessie A. Elliott, Louise Buckley, Antonis Athanasiou, Thomas J. Murphy

Department of Surgery, Mercy University Hospital, Cork, Ireland

**Background:** Spontaneous oesophageal perforation (Boerhaave's syndrome) is a highly morbid condition traditionally associated with poor outcomes. The Pittsburgh perforation severity score (PSS) accurately predicts risk of morbidity, length of stay (LOS) and mortality. Operative management is indicated among patients with intermediate (3–5) or high (>5) PSS, however the role of minimally invasive surgery remains uncertain.

**Methods:** Consecutive patients presenting with Boerhaave's syndrome with intermediate or high PSS to a single oesophagogastric unit from 2012–2017 were studied. Demographic, clinical presentation, management and outcomes were analysed.

**Results:** Ten patients (80% male) with a mean age of 61.2 years (range, 37–81 years) were included. Three patients had

intermediate and seven high PSS ( $7.3 \pm 2.9$ , range, 4–12). Time from onset of symptoms to diagnosis was  $25 \pm 15$  hours and APACHE II score was  $12.4 \pm 6.7$ . Thoracoscopic debridement and primary repair was performed in seven patients, with two perforations repaired primarily over a T-tube. Laparoscopic feeding jejunostomy was performed in all cases, and decompressing gastrostomy in five patients. Critical care LOS was  $8.1 \pm 7.5$  (range, 0–26) and inpatient LOS  $22.1 \pm 12.3$  days (range, 8–46 days), significantly associated with PSS ( $P=0.01$ ,  $R^2=0.63$ ). Median comprehensive complications index was 34.6 (range, 0–69.6), with grade IIIa and IV morbidity in 50% and 10%, respectively. One patient developed dehiscence at the primary repair, which was managed non-operatively. In-hospital and 90-day mortality was 10%.

**Conclusions:** Minimally invasive surgical management of spontaneous oesophageal perforation with high perforation severity scores is feasible and safe, with outcomes which compare favourably to the published literature.

**Keywords:** Thoracoscopy; minimally invasive surgery; Boerhaave's syndrome; oesophageal perforation

doi: 10.21037/map.2018.AB024

**Cite this abstract as:** Elliott JA, Buckley L, Athanasiou A, Murphy TJ. Minimally invasive surgical management of spontaneous oesophageal perforation (Boerhaave's syndrome). *Mesentery Peritoneum* 2018;2:AB024. doi: 10.21037/map.2018.AB024