

transhiatal (THO) and 2-stage (2-ST) resections are routinely practised in our unit, largely according to individual surgeon preference.

**Methods** A prospectively collected database containing 550 consecutive resections was available for analysis. All other variables (Investigation, MDT decision making and ITU input) were consistent within the unit.

**Results** Between 2000 and 2010, 267 patients underwent THO and 283 had 2-ST oesophagectomy. Demographics showed equal characteristics between the groups with a median age of 65 years old and a predominantly male population. Adenocarcinomas made up 79% of resections. 330 (60%) patients underwent neo-adjuvant chemotherapy. 58% were pre-operatively staged as having stage 3 disease. In-hospital mortality was 1.1% (THO) vs 1.5% (2-ST). Hospital stay was similar between the two groups (median 14 days vs 15 days). Median survival on Kaplan–Meier analysis was 49 months for THO vs 34 months for 2-ST ( $p < 0.0005$ ). Further analysis of the 2-ST procedures showed median survival of 40 months, 29 months and 23 months for laparoscopic assisted, left thoraco-abdominal and ivor-lewis resections respectively.

**Conclusion** Only one randomised trial has ever compared the two operative approaches, demonstrating no survival advantage for more radical 2-Stage surgery. Quality of life data may support transhiatal resections. Our data suggests that transhiatal resections carry a low post-operative mortality with good long term survival rates that are at least comparable to 2-Stage procedures. Transhiatal oesophagectomy is a viable alternative in the treatment of oesophageal cancer.

**Competing interests** None declared.

PTU-169

#### GIANT HIATUS HERNIA REPAIR: A SINGLE-CENTRE EXPERIENCE OF THE CRURASOFT® (BARD) COMPOSITE MESH

doi:10.1136/gutjnl-2012-302514c.169

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**Introduction** Use of prosthetic mesh is advocated in giant hiatus hernia repair to reduce the chance of recurrence. However, complications related to the use of mesh at the oesophageal hiatus have been reported. Composite meshes have been developed which have a lower adhesive potential and may reduce complication rates. We report the outcome of a large case series of patients undergoing hiatus hernia repair using the composite Crurasoft® (BARD) mesh.

**Methods** A retrospective study was performed of all patients who had undergone primary or recurrent hiatus hernia repair using Crurasoft® (BARD) mesh in a single tertiary referral centre. Patient demographics, pre-operative investigations, operation and follow-up details were recorded.

**Results** Over a 6-year period 53 patients underwent laparoscopic hiatus hernia repair using Crurasoft® (BARD) mesh, of which 36 patients had a primary giant hiatus hernia repair. A concurrent anti-reflux procedure was performed in 44 patients. There were three conversions to open operation, two in patients undergoing primary repair due to difficulties reducing the stomach, and one in a patient undergoing surgery for recurrence due to adhesions. The median time for follow-up was 45 months (range 8–94). Significant complications included dysphagia in 12 (22.6%) patients, which was due to an oesophageal stricture in 2 (3.8%) patients. Mesh erosion into the oesophagus occurred in 2 (3.8%) patients, and 12 (22.6%) patients developed a symptomatic recurrence. Reoperation within 30 days of initial surgery was required in 5 (9.4%) patients and was due to an early recurrence in 3 (5.7%) patients. There were no mortalities.

**Conclusion** The composite Crurasoft® (BARD) mesh can successfully be used in giant hiatus hernia repair. However, this mesh does

not prevent significant mesh related oesophageal complications and is associated with a high recurrence rate.

**Competing interests** None declared.

PTU-170

#### A COMPARISON OF THE EARLY QUALITY OF LIFE OUTCOMES BETWEEN OPEN AND LAPAROSCOPIC OESOPHAGOGASTRIC RESECTIONAL SURGERY

doi:10.1136/gutjnl-2012-302514c.170

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**Introduction** There is a paucity of data directly comparing health related quality of life (HRQL) between laparoscopic and open oesophagogastric resections. This study aims to evaluate differences between these groups in the early postoperative period.

**Methods** The European Organisation for Research and Treatment Quality of Life Questionnaire Core 30 (EORTC QLQ-30) was administered to 34 patients preoperatively, and 1 month following laparoscopic gastrectomy (n=6), open gastrectomy (n=8), open two-phase oesophagectomy (n=7), and two-phase oesophagectomy with laparoscopic gastric mobilisation (n=13). Mann–Whitney U tests were used to compare HRQL between open and laparoscopic resections, and related sample Wilcoxon signed rank tests were used to compare 1 month and preoperative HRQL.

**Results** There was no significant difference in median preoperative functional and global HRQL between both the open and laparoscopic gastrectomy groups (10 vs 11,  $p=0.41$ ; 11 vs 11,  $p=1.00$ ), and between the open and laparoscopic-assisted oesophagectomy groups (18 vs 11,  $p=0.18$ ; 10 vs 11,  $p=0.70$ ). Functional HRQL worsened significantly at 1 month with both open gastrectomy (18 vs 10,  $p=0.01$ ) and open oesophagectomy (18 vs 11,  $p=0.02$ ), but not with laparoscopic gastrectomy (15 vs 11,  $p=0.11$ ) and laparoscopic assisted-oesophagectomy (15 vs 18,  $p=0.81$ ). Global HRQL was significantly worse at 1 month with open gastrectomy (7 vs 11,  $p=0.04$ ), but not in the other groups. Global HRQL was also found to be significantly higher at 1 month in the laparoscopic assisted oesophagectomy group compared with open oesophagectomy (10 vs 8,  $p=0.03$ ).

**Conclusion** These results demonstrate significant differences in HRQL between open and laparoscopic oesophagogastric resections even at 1 month, which may indicate that the laparoscopic approach is associated with faster postoperative recovery.

**Competing interests** None declared.

PTU-171

#### OESTROGEN PLAYS A CRITICAL ROLE IN MURINE EPITHELIAL HEALING IN A BUCCAL MODEL OF REFLUX INJURY

doi:10.1136/gutjnl-2012-302514c.171

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**Introduction** Severe oesophagitis, oesophageal adenocarcinoma (OAC) are more common in men and post-menopausal women. Female sex hormones may protect pre-menopausal women from gastro-oesophageal reflux mediated mucosal damage, delaying the onset of BO and development of OAC in women. We have demonstrated more rapid mucosal healing and less inflammatory response in females in a murine buccal model of reflux injury. We have used a model comparing intact female mice with oestrogen deprived mice (by removal of their ovaries) to determine if this effect may be oestrogen driven.