

## OC-124 CENTRALISATION OF OG SERVICES IN THE WEST OF SCOTLAND: ARE WE MATCHING THE OUTCOMES OF THE UK NATIONAL OG AUDIT?

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A Crumley,\* G Bryce, G Fullarton, C MacKay, C Craig, M Forshaw. *Regional OG Unit, Glasgow Royal Infirmary, Glasgow, UK*

**Introduction** The SAGOC report (1997–2000) highlighted the high morbidity and mortality of oesophageal and gastric resections in Scotland. Since then, centralisation into higher volume units has only slowly occurred in Scotland. The UK National Oesophago-Gastric Audit has not included data from Scotland and direct comparisons of outcomes have been lacking. The aim of this study was to assess the surgical outcomes following the establishment of a regional unit in 2007 relative to the outcomes of the National Oesophago-Gastric Audit 2010.

**Methods** A prospective database (August 2007–December 2011) recorded the demographic details, treatment received, postoperative events and pathology outcomes for all patients undergoing oesophageal or gastric resections. The data were recorded into a Microsoft Excel database and wherever possible the same definitions were utilised as per the National Oesophago-Gastric Audit.

**Results** 233 patients (males=174 (75%); median age = 66 years) underwent either oesophageal or gastric resections, predominantly for adenocarcinoma (88%). 67% of patients received preoperative chemotherapy. 125 patients underwent oesophagectomy: transthoracic (n=73), transhiatal (n=46), inoperable (n=6). 102 patients underwent gastrectomy: total (n=41), subtotal (n=49), inoperable/bypass (n=12). Six patients underwent wedge resections. 30 day and in-hospital mortality following oesophagectomy was 1.7% and 3.4% respectively, all in patients undergoing transthoracic oesophagectomy and most commonly due to respiratory complications. 30 day and in-hospital mortality following gastrectomy was 3.3% and 5.6% respectively, all in patients undergoing total gastrectomy and most commonly due to surgical complications. 33 patients (14.1%) were admitted to ICU most commonly for respiratory failure and following anastomotic leakage. 37 patients (17.8%) underwent reoperation including endoscopic interventions. Clinical and radiological anastomotic leaks were observed in 12% of oesophagectomies and 10% of gastrectomies. Longitudinal and circumferential margin involvement occurred in 2.6% and 26.3% of oesophageal resections respectively. Longitudinal margin involvement was seen in 11% of gastric resections. Median lymph node was 16 (range=3–54) for all resections. More than six lymph nodes were removed in all oesophageal resections. However, <25 lymph nodes were removed in nearly 80% of gastric resections.

**Conclusion** The results from this newly established regional unit compare favourably with the outcomes from National Oesophago-Gastric Audit. Significant differences were highlighted in the proportion of transhiatal resections, the absence of minimally invasive surgery and longitudinal margin involvement and lymph node yields for gastric cancer surgery.

**Competing interests** None declared.

## OC-125 IRON DEFICIENCY ANAEMIA IS A COMMON PRESENTING ISSUE WITH GIANT PARAESOPHAGEAL HERNIA AND RESOLVES FOLLOWING REPAIR

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S R Markar,\* P Carrott Jr, J Hong, D Low. *Esophageal Surgery, Virginia Mason Medical Center, Seattle, USA, Seattle, USA*

**Introduction** Giant Paraesophageal hiatal hernias (PEH) are most commonly associated with symptoms of chest pain, early satiety

and GERD. However, Iron-deficiency anaemia is an under-appreciated condition associated with giant PEH. The aim of this study was to evaluate the incidence of iron-deficiency anaemia in a cohort of patients with giant PEH and assess the incidence of resolution associated with operative PEH repair.

**Methods** Between 2000 and 2010, 270 patients underwent operative repair of PEH and were prospectively entered into an IRB-approved database. From this cohort, 123 (45.6%) patients demonstrated a pre-existing diagnosis of iron-deficiency anaemia. 77 patients had a documented pre-operative haemoglobin level (Hb) consistent with iron-deficiency anaemia and a follow-up Hb level at least 3 months following surgery and constituted the study population.

**Results** From the cohort of 77 patients with documented pre-operative iron-deficiency anaemia, 72 (94%) underwent elective PEH repair, with a median age was 75 (range 39–91). Cameron erosions were endoscopically documented preoperatively in 25 patients (32%). The average preoperative Hb value was 11.8 (7.6–16). Post-operatively at 3–12 month follow-up, the average Hb level was 13.2 (10.7–17), and at more than 1 year follow-up it was 13.6 (9.2–17.2) (p<0.05). Furthermore 90% of patients had a rise in post-operative haemoglobin level by at least 1 g/dl. Anaemia was fully resolved postoperatively (Hb≥12.0 in females, ≥14.0 in males) in 55 (71%) patients. This resolution was observed more commonly in women (40/50, 80%) than men (15/27, 56%, p<0.05). Also younger patients (<70 years) were more likely to resolve their anaemia (29/33 vs 26/44; p<0.05) and have a greater post-operative Hb (14.0 vs 13.0 g/dl; p<0.05) than older patients. 40 patients required preoperative iron supplementation, 29 (73%) were able to discontinue iron following surgery. There was no significant difference in the resolution of anaemia in patients with or without Cameron erosions (19/25 vs 36/52, p=0.54).

**Conclusion** This single institution study shows a high incidence of iron-deficiency anaemia (45.6%) in patients with giant PEH. Elective repair results in resolution of the anaemia and discontinuation of iron supplementation therapy, in more than 70% of patients. This improvement in Hb is independent of the presence of pre-operative Cameron erosions. This study demonstrates the clinical and potential economic benefits of elective PEH repair of patients with Giant PEH and iron-deficiency anaemia.

**Competing interests** None declared.

## OC-126 TRANSLOCATION OF MULTIDISCIPLINARY STANDARDISED CLINICAL PATHWAYS BETWEEN HOSPITALS AND HEALTH SYSTEMS IS FEASIBLE AND CAN PRODUCE IMMEDIATE IMPROVEMENT IN PERIOPERATIVE OUTCOMES OF SURGICAL TREATMENT OF OESOPHAGEAL CANCER

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<sup>1</sup>S Preston,\* <sup>2</sup>S R Markar, <sup>1</sup>C Baker, <sup>1</sup>Y Soon, <sup>1</sup>S Singh, <sup>2</sup>D Low. <sup>1</sup>Royal Surrey County Hospital, Guildford, UK; <sup>2</sup>Virginia Mason Medical Center, Seattle, USA, Seattle, USA

**Introduction** Standardised postoperative care pathways (SPCP) allow the introduction of a targeted goal-directed approach to recovery following major cancer surgery. A standardised oesophagectomy clinical pathway was established at Virginia Mason Medical Center (VMMC), Seattle, USA in 1991 and has undergone five revisions up to 2011. No information exists as to whether pathways can be successfully relocated between different cancer programs and health systems. In March 2011 a multidisciplinary team from the Royal Surrey County Hospital (RSC) visited VMMC and instituted a similar pathway in April 2011. The aim of this study is to determine the effect of the translocation and implementation of an oesophagectomy care pathway on postoperative outcomes within a 1 year time period.