UPPER-GASTROINTESTINAL SURGERY

0002: DO LAPAROSCOPICALLY-ASSISTED AND MINIMALLY INVASIVE OESOPHAGECTOMIES IMPROVE OUTCOMES WHEN COMPARED TO THE TRADITIONAL OPEN METHOD?

Michael Harrison, Dan Titcomb, Ivan Sychev. *University of Bristol, Bristol, UK.*

Aim: Surgical resection is the primary method of treating oesophageal cancer, although the most effective style of surgery is not clear. The aim is to retrospectively audit patients who underwent all elective oesophagectomy from 2005 at Bristol's NHS Foundation Trust.

Method: Clinical outcomes and histopathological data were collected and analysed for the three oesophagectomy techniques; open, laparoscopically-assisted (LAO) and minimally-invasive (MIO).

Results: Since 2005, 322 patients (MIO=69; LAO=172; Open=81) underwent oesophagectomy. Mean blood loss for MIO and LAO was significantly less ($P<0.0001$) than open (222ml and 359ml vs. 778ml); conversely mean duration for open surgery was significantly less ($P< 0.001$) than MIO and LAO (334mins vs. 380mins and 365mins). The 1-year mortality rate for MIO was significantly less ($P<0.02$) than LAO and Open (4.3% vs. 17.4% and 22.2%); however there were no significant differences in length of hospital stay, morbidity and 30-day mortality.

Conclusion: The MIO and LAO techniques used here have shown to produce results on par with the traditional open method however it is not yet possible to stipulate if and LAO improve long-term outcomes. Further research is required to further these short-term findings and provide an accurate long-term prognosis after surgery.

0096: DO BARIATRIC PATIENT SUPPORT GROUPS INFLUENCE SHORT TERM SURGICAL OUTCOMES?

Simon Monkhouse, Mohsin Choudry, Terry Sergeant, Sue Colley, Keith Seymour, Sean Woodcock. *North Tyneside General Hospital, Northumbria Healthcare NHS Trust, Tyne and Wear, UK.*

Background: In some bariatric services, patients have formed support groups led exclusively by patients. Does attendance at such groups influence outcomes?

Methods: A prospectively compiled database was accessed, 118 patients who underwent gastric banding, bypass or sleeve gastrectomy were contacted and asked about support group attendance, frequency and reasons for participation. Pre-operative body mass index, age, and twelve month percentage excess weight loss (12m%EWL) was recorded.

Results: The 12m%EWL for band patients was 40.1% (attendees) and 46.4% (non-attendees), for bypass patients it was 74.8% (attendees) and 75.6% (non-attendees) and for sleeve patients, it was 51.3% (attendees) and 44.3% (non-attendees). Following gastric banding, 12m%EWL was 28.1%, 42.7% and 49.3% for patients attending either 1, 1-5, >5 sessions respectively. The main reason cited for attendance was 'to meet like-minded people' and for non-attendance was 'being too busy'.

Conclusions: For bands, bypasses and sleeves there was no significant difference in weight loss outcomes (attendees vs non-attendees). For band patients, increased attendance was associated with increasing 12%EWL, in keeping with existing literature. This study, accepting the limitations of using 12m%EWL as a surrogate for success, confers the psycho-social benefits of support groups but suggests such groups are not apparently required for absolute weight loss.

0143: CONSENT FOR CHOLECYSTECTOMY – DO PATIENTS REALLY UNDERSTAND WHAT WE ARE TALKING ABOUT?

Meera Joshi, Deepa Bapu, Kian Chin. *Milton Keynes Hospital NHS Foundation Trust, Milton Keynes, UK.*

Aim: To assess quality of consenting process for day case laparoscopic cholecystectomy (LC) when consenting is carried out on the day of surgery in terms of patient understanding of the risks and benefits of surgery and adequacy of information provided by surgeons during consent.

Method: From March-July 2012, 50 patients consented for LC, filled out a questionnaire compiling complications and percentage risks provided during consenting. The questionnaires and consent forms (CF) were reviewed to identify discrepancies between the two and assess completeness of information in CF.

Results: Large discrepancies existed between information in CF and understanding by patient with important risks like CBD injury and bile leak not remembered by 22%(n=11/50), and 18%(n=9/50) of patients respectively. The quality of CF was suboptimal with key risks such as CBD injury/bile leak not mentioned in 4% of CF (n=2/50) and patient identifiers missing from 34% (n=17/50) of forms.

Conclusions: Consenting on the day of surgery for day case LC results in suboptimal consenting both in terms of patient understanding and quality of consent forms. We aim to use pre-printed CF's and information leaflets explaining the procedure to patients prior to the day of surgery to improve patient understanding and quality of consenting.

0335: C-REACTIVE PROTEIN IS A BETTER PREDICTOR OF PERFORATED APPENDICITIS THAN HYPERBILIRUBINEMIA

Rishi Mandavia[1], Dawit Worku[3], Natalie Lane[2], Hemant Sheth[3]. [1] *Academic Surgery, Northwest Thames Foundation School, London, UK;* [2] *Imperial College London School of Medicine, London, UK;* [3] *Ealing Hospital, London, UK.*

Aims: We compared the diagnostic importance of total bilirubin, C-reactive protein (CRP) and leucocyte count as markers of perforation in acute appendicitis.

Methods: 116 patients with clinical acute appendicitis that underwent a laparoscopic or open appendicectomy at our hospital between October 2011 and October 2012 were identified. A retrospective chart review of the medical records, including laboratory and histologic results, were conducted. The data was analyzed using binary logistic regression.

Results: Among the 116 patients, 92 patients (79.3%) had pathologically confirmed acute appendicitis. Out of the 92 patients, 9 (9.7%) had histologically confirmed perforated appendicitis. The logistic regression model showed a significantly raised level of CRP in those patients with appendiceal perforation (odds ratio, 1.014; 95% confidence interval (CI), 1.002 to 1.026; $p = 0.027$). Total bilirubin level (odds ratio, 1.061; 95% CI, 0.972 to 1.158, $p = 0.187$), total white blood cell count (odds ratio, 0.498; 95% CI, 0.150 to 1.649, $p = 0.254$) and neutrophil count (odds ratio, 2.239; 95% CI, 0.604 to 8.295, $p = 0.228$) did not predict perforated acute appendicitis to statistical significance.

Conclusions: Elevated CRP level has a better predictive potential than hyperbilirubinemia for the diagnosis of appendiceal perforation.

0385: HYPERBILIRUBINEMIA AS A MARKER FOR ACUTE APPENDICITIS

Dawit Worku[3], Rishi Mandavia[1], Natalie Lane[2], Hemant Sheth[3]. [1] *Academic Surgery, Northwest Thames Foundation School, London, UK;* [2] *Imperial College London, School of Medicine, London, UK;* [3] *Ealing Hospital, London, UK.*

Aims: To determine the value of hyperbilirubinemia as a marker for acute appendicitis.

Methods: 116 patients with clinical acute appendicitis that underwent a laparoscopic or open appendicectomy at our hospital between October 2011 and October 2012 were included. A retrospective review of the medical records, including laboratory and histologic results, was conducted. The data was analysed using binary logistic regression.

Results: Among the 116 patients, laparoscopic appendicectomy was performed in 70 cases (47.3%), laparoscopic converted to open appendicectomy in 2 cases (1.4%) and an open appendicectomy was carried out in 44 cases (29.7%). 92 patients (79.3%) had pathologically confirmed acute appendicitis. The logistic regression model demonstrated a significantly raised total bilirubin level in those with a histologically confirmed diagnosis of acute appendicitis (odds ratio, 1.215; 95% confidence interval (CI), 1.038 to 1.422; $p = 0.015$). Total white blood cell count (odds ratio, 1.655; 95% CI, 0.873 to 3.140 ; $p = 0.12$), neutrophil count (odds ratio, 0.643; 95% CI, 0.333 to 1.243, $p = 0.19$) and C-reactive protein (odds ratio, 0.999; 95% CI, 0.992 to 1.006, $p = 0.73$) did not predict acute appendicitis to a statistically significant degree.

Conclusions: Hyperbilirubinemia is a statistically significant diagnostic marker for acute appendicitis.

0389: DAY CASE GASTRIC BYPASS SURGERY

Simon Monkhouse, Mohsin Choudry, Sean Woodcock, Keith Seymour. *North Tyneside General Hospital, Tyne and Wear, UK.*

Background: Enhanced recovery is a familiar concept in colorectal surgery but what does it mean in bariatrics? During the last seven years, evolution of our multidisciplinary service into an efficient programme, has led to an

enhanced recovery programme. This process begins with appropriate case selection, multidisciplinary team assessment, patient education, dietetic and psychological counselling. Post-operatively it concludes with an early return to oral intake, activity and close follow up. This study examines the results of this efficiency programme with respect to length of stay (LOS) leading to day-case (D/C) gastric bypass surgery (GBS).
Methods: A prospectively entered database was interrogated for primary GBS performed between June 2006 and October 2012. Mean and mode LOS were calculated.
Results: 330 patients were identified. In 2006 (n=2) mean LOS 4.5. 2007 (n=16) mean LOS 4.1, mode 5, 2008 (n=31) mean LOS 2.1, mode 3, 2009 (n=57) mean LOS 2.6, mode 2, 2010 (n=88) mean LOS 1.8, mode 2, 2011 (n=74) mean LOS 1.8, mode 2, 2012 (n=62 (2 = D/C)) mean LOS 1.6, mode 1.
Conclusions: We report a decreasing length of stay evolving into day-case gastric bypass surgery. These improvements are multidisciplinary and day-case rates are likely to increase.

0422: RE-INTERVENTION FOLLOWING PALLIATIVE OESOPHAGEAL STENT INSERTION

James Douglas, Andrew Torrance, Martin Wadley. *Department of Surgery, Worcestershire Royal Hospital, Worcestershire, UK.*

Introduction: Patients with advanced oesophageal cancer often present with dysphagia. Self-expanding metal stents (SEMS) are used as a palliative therapy to relieve dysphagia and improve quality of life whilst minimizing morbidity and mortality. This study aims to assess the rate and impact of re-intervention following oesophageal stenting.
Method: A retrospective review of oesophageal stenting for malignancy over a one year period at a single centre. Patient demographics, diagnosis, complications, re-interventions and mortality data were collected.
Results: 58 oesophageal stents were inserted in 45 patients (30 male, median age 79). 17 (29.3%) stents migrated. 15 (33%) patients required at least one endoscopic re-intervention, 6 (13.3%) required a second re-intervention and 4 (8.9%) a third. 4 (26.7%) complications were identified in re-intervention patients compared to 1 (3.3%) complication in those patients not requiring re-intervention (p=0.04). 29 patients (64.4%) died during the study period with a median survival intervention free survival of 60 days (no-re-intervention = 60 days, re-intervention = 56 days). Complications included aspiration pneumonia (3.4%), perforation (1.7%), trachea-oesophageal fistula (1.7%).
Conclusion: Oesophageal stenting with SEMS is effective with low complication rates. One third of patients require endoscopic re-intervention. Re-intervention significantly increased the risk of complication.

0467: THE BETTER DEFINITION OF NODAL STAGING IN THE 7TH EDITION OF TNM MANUAL DOES NOT PREDICT SURVIVAL OR TRANSLATES INTO BETTER PROGNOSTICATING ABILITY IN OESOPHAGO-GASTRIC JUNCTIONAL ADENOCARCINOMA

Ramesh Yap Kannan, Matthew Davies, Carys Jenkins, Ashraf Rasheed. *Royal Gwent Hospital, Newport, Wales, UK.*

Aims: To study the impact of the 7th TNM staging on nodal neo-staging (N) of resected and pathologically reported oesophago-gastric junctional adenocarcinomas (OGJA), compare the original staging and assess possible impact of N on overall survival (OS).
Methods: A retrospective database containing data of all consecutive curative resections of OGJA over 10 years was obtained. Any report with less than 12 lymph nodes was considered inadequate. All N and OS was analysed. OS was sub-stratified into 2, 5 and 10 years post curative resection.
Results: 57 pathology reports confirming OGJA were reviewed. Adequate lymphadenectomy (ALN) was noted in 33 patients. N was noted in 36. Of those who had ALN (33), 20 had stage migration. Two year survival (n=57), 5 year survival for patients operated between 2000 to 2007 (n=34) and 10 year survival for patients treated between 2000 to 2002 (n=10) was analysed. For stage 3b and stage 3c, there was a 12.5%, 8.9% and 8.9% higher survival rate respectively. Correspondingly for stage 1b, the survival rate was 5.3%, 3.6% and 3.6% respectively.
Conclusion: The 7th TNM staging better defines lymphatic staging, but does not seem to predict survival or have a superior prognosticating ability.

0488: THE EFFICACY OF ULTRASOUND SCANNING AS A DIAGNOSTIC TOOL IN CASES OF SUSPECTED APPENDICITIS

Rishi Mandavia[1], Mimi Li[2], Hemant Sheth[3]. [1] *North West Thames Foundation School, London, UK;* [2] *Imperial College London, London, UK;* [3] *Department of Upper Gastrointestinal Surgery, Ealing Hospital, London, UK.*

Aim: Acute appendicitis continues to be a challenging diagnosis. Preoperative imaging using ultrasound has gained popularity as it may assist diagnosis, particularly when clinical diagnosis is uncertain. The optimal implementation of ultrasound has yet to be established. We aimed to evaluate the use of ultrasound scanning in the diagnosis of appendicitis.
Method: A 1-year retrospective review of the medical records of all patients who underwent laparoscopic or open appendectomy was conducted. Patient history, ultrasound reports and histological findings were reviewed.
Results: 116 patients were included. 45 (39%) underwent ultrasonography. The sensitivity of ultrasonography was 56.4% and specificity was 83.3%. Accuracy of diagnosis by ultrasonography was 60.0%.
Conclusions: Ultrasonography had a high specificity, and therefore appeared fairly accurate in excluding appendicitis. However, owing to its poor sensitivity and accuracy rates, it did not appear particularly useful in diagnosing appendicitis. Thus, whilst the routine use of ultrasound in all our patients suspected of having appendicitis cannot be advocated, it may be useful in excluding appendicitis when clinical diagnosis is uncertain.

0515: LAPAROSCOPIC SLEEVE GASTRECTOMY AND ROUTINE HISTOLOGICAL EXAMINATION OF GASTRIC SPECIMENS

Jason George, Nicholas Carter, Mohamed Elkalaawy, Majid Hashemi, Marco Adamo, Andrew Jenkinson. *University College Hospital, London, UK.*

Background: Laparoscopic Sleeve Gastrectomy (LSG) involves resection of most of the stomach. Currently there are no agreements with regards to routine histological examination of the specimen. The aim of this study was to identify incidence of abnormalities in the specimens and to establish if routine pathological examination is beneficial.
Method: All patients who have undergone LSG during the last five years were identified from our prospectively collected database. Histology reports were retrieved. Specimens are examined macroscopically and microscopically, noting any abnormalities, including Warthin-Starry staining for helicobacter pylori infection (HP).
Results: During the study period, 409 gastric specimens were examined. No dysplasia or cancer was found. 224 (54%) showed no abnormalities or any HP infection. 1 patient had an incidental GIST completely removed. 70 (17%) had HP positivity. 63 (15%) had a degree of HP gastritis and 96 (23%) had non HP gastritis. 2 had lymphocytic gastritis and 7 (1.7%) had benign fundal polyps. 8 (2%) had some intestinal metaplasia.
Conclusion: 46% of gastric specimens after LSG showed abnormalities. In addition, 17% had HP confirmed, requiring post operative eradication. Routine histological examination with HP testing of gastric specimens is recommended after LSG.

0724: MODERN MANAGEMENT OF GASTRIC AND SMALL BOWEL GISTS

Claire Rutherford, Paul Turner. *Lancashire Teaching Hospitals NHS Trust, Lancashire, UK.*

Gastrointestinal stromal tumours (GISTs) account for 1-3% of all GI malignancies. Due to their relative rarity, a retrospective case series was performed to gain further data on current management and outcomes.
A consecutive case series was performed within RPH UGI Unit, assessing all GIST resections undertaken. Patient records and MDT outcomes were studied.
A total of 24 GIST resections were undertaken between March 2008 and October 2012. A variety of investigations were used in the detection and assessment of these GISTs, including CT, OGD and EUS.
All 24 resections were R0. 12 were carried out laparoscopically, 5 laparoscopically-assisted and 7 open, of which the rates of laparoscopically-assisted and open have reduced annually.
Immunohistochemistry identified 18 of the resected tumours as cKit positive and 20 as DOG1 positive. Mittenien Classification varied from 1 to 6a.
It is essential each patient's case is discussed at a specialist UGI MDT. Due to improved surgical techniques and equipment, patient satisfaction and oncological outcomes are improving. Laparoscopic resection is now the preferred technique for resectable non-malignant gastric GISTs.