removal of macroscopically normal looking appendix in detecting occult carcinoids (<1 cm in diameter) is not well studied.

**Methods:** Data pertaining to detection of carcinoid tumours from appendectomy specimens over a 10-year period in a single tertiary institution was collected from theatre records, cancer data software and patient notes. The percentage of macroscopically normal looking specimens removed with incidental finding of carcinoid tumours was analysed.

**Results:** A total of 4312 appendectomies were performed during 2000 – 2010. Of these, incidental carcinoids were detected in 18 specimens. 4 (22%) of these appendices were macroscopically normal during the procedure with occult carcinoid detected on histological analysis.

**Conclusions:** A significant proportion of appendicular carcinoids were detected in macroscopically normal looking appendices. Routine excision of such appendices would enhance the detection of occult tumours, which have a favourable prognosis if detected well in time. We recommend routine removal of appendix if no obvious cause for the symptoms was found at laparoscopy for acute abdomen.

**0490: THE SEARCH FOR AN IDEAL METHOD OF COLORECTAL ANASTOMOSIS: A META-ANALYSIS**

Omar Sharqí, Daniel Cocker, Alistair Slesser. Department of Surgery, Imperial College London, London, UK.

**Introduction:** Anastomotic leakage remains a significant problem following colorectal resections. Alternatives to traditional hand-sewn and stapled anastomosis techniques are being sought and there has been a resurgence of interest in sutureless compression devices. This study aimed to determine whether there was a difference in anastomotic leak rates in patients undergoing compression, hand-sewn or stapled anastomoses.

**Methods:** Articles were searched for in MEDLINE, Embase and the Cochrane Library. Randomised Controlled Trials (RCTs) comparing outcomes of compression versus hand-sewn and stapled colorectal anastomosis were included and pooled odds ratios (OR) were calculated. The quality of the RCTs and potential risk of bias were assessed using the Cochrane risk of bias tool.

**Results:** Nine RCTs were included in the analysis, comprising a total of 1969 patients (752 hand-sewn, 225 stapled and 992 compression anastomoses). Six trials compared compression with hand-sewn anastomosis; no significant differences in anastomotic leak rates were detected (OR 0.93, 95% confidence interval (c.i) 0.4 to 1.71; P = 0.61). Four trials compared compression with stapled anastomosis; the incidence of anastomotic leakage was similar (OR 0.57, 95% c.i. 0.26-1.21, P = 0.14).

**Conclusions:** Based on current evidence, compression anastomosis offers no significant benefit in reducing anastomotic leakage rates compared to hand-sewn and stapled techniques.

**0498: INCISIONAL HERNIA RATES IN LAPAROSCOPIC AND OPEN COLORECTAL MALIGNANCY RESECTIONS AT A FOUNDATION TRUST IN NORTH WEST REGION**

Jessica Packer, Hannah Pickford, Fergus Reid. Stockport NHS Foundation Trust, Stockport, Cheshire, UK.

**Introduction:** Incisional hernia rates vary nationally but have not recently been audited at the Trust. We compare practice with national standard.

**Methods:** Colorectal cancer database identified patients undergoing laparoscopic and open colorectal malignancy resection between 2010-2012. Retrospective review of follow up and imaging was recorded on a spreadsheet. Review of current literature established the standard- CLASICC Trial 2010 (Medical Research Council’s Conventional vs Laparoscopic Assisted Surgery in Colorectal Cancer: Incisional hernia rates should be < or + 9% in laparoscopic and < or -9.5% in open cases. Statistical analysis was performed using Chi² test.

**Results:** 169 (84%) elective and 33 (16%) emergency patients were included. 146 cases were open and 35 laparoscopic with the remainder lap-assisted/converted. Incisional hernia rates in elective patients were higher (18.9%), compared with 15% in emergency patients but not statistically significant (p = 0.607). Comparing laparoscopic and open patients completely, 6 (18%) of laparoscopic cases, and 29 (19.8%) of open cases developed incisional hernias but this difference was not statistically significant (p = 0.714).

**Conclusions:** Our incisional hernia rates are double the gold standard. Incisional hernia development is multi-factorial but we need to improve our rates to mirror those elsewhere. Changes will be implemented to improve practice.

**0509: EFFECT OF LOCAL ANESTHESIA ON ANORECTAL MANOMETRY IN PATIENTS WITH CHRONIC ANAL FISSURE**

Khalil ElGendy*, Ahmed Farag. Cairo University Hospitals, Cairo, Egypt.

**Introduction:** To study the different manometric data of patients with chronic anal fissure (CAF) before and after the application of local anesthetics.

**Methods:** 20 Patients with CAF were included. Patients associated with other specific anal pathology, previous anal surgery or any neurological disorders affecting pain perception were excluded. ARM was done before and after topical application of local anesthetic.

**Results:** History of incontinence (65%, with varying degrees), in many of our studied patients raise the importance of anorectal physiology studies in simple anorectal disorders. Regarding the manometry results, there was significant decrease in resting anal pressures (p = 0.01). However, anal squeeze pressures and endurance squeeze pressures were significantly higher (p < 0.01). Rectal pressure during the defecation increased significantly, indicating improvement in the defecation process (p < 0.01). The threshold volumes for initiation of different rectal sensations (constant sensation, first urge, maximal tolerable volume) were also significantly higher (p = 0.02-0.04) Not only increasing the rectal capacity, but also improving significantly overall rectal compliance (p = 0.02).

**Conclusions:** The effect of anal pain extends from just symptomatic discomfort to affect the highly integrated ano-rectum segment both in continence and defecation. This can only be explained by the high integration and interaction between the anal canal and the rectum.

**0510: PATHOLOGY OF SURGICALLY RESECTED RECTAL CANCELS: FIRST LOCAL AUDIT**

Khalil ElGendy, Riya Chandran. King Fahad Specialist Hospital, Damman, Saudi Arabia.

**Introduction:** To audit the pathological reporting of the resected rectal cancers (LAR/APR) and highlighting important facts about rectal cancer.

**Methods:** Retrospective analysis of reports in 2011 & 2012. The lab is accredited by College of American Pathologists and score of 22-items based on their protocol is used to assess the adequacy of reporting.

**Results:** 59 patients were recruited (20 in 2011, 39 in 2012), 43 males, average age of 55 years (24-79), with 35.6% below 50 years. In 2011, 35% of reports were using the pro-forma while in 2012, 38.5% used it. There was highly significant difference between the average percent items reporting in 2011 (52%) and 2012 (63%) (p = 0.025). The least reported items were the peritumour and intraluminal lymphocytic responses, intactness of mesorectum, presence of perforation and associated findings (<20%). Average LN retrieved after APR (9.75) and percent of satisfactory LN (>12) (41.7%) was lower than LAR (12.9 LN, 57.4%). There is no significant difference between the LN retrieved when comparing the No-neoadjuvant, chemotherapy or CCRT patients.

**Conclusions:** There is marked variability of pathological reporting that affects the prognosis evaluation. Application of proforma improves the reporting quality. The audit expanded to include (2009 to 2013) patients.

**0518: INCLUSION OF OLDER PATIENTS IN ERAS PROGRAMME DOES NOT COMPROMISE OUTCOME**

Junaid Khan*, Claire McCutcheon, Lyndsey Chisholm, Andrew Renwick, Patrick Finn, Mark Vella, Susan Moung. Royal Alexandria Hospital, Paisley, UK.

**Introduction:** Enhanced recovery after surgery (ERAS) programme improves the care of elective surgical patients, there is little data assessing ERAS in older patients. This study aims to compare outcome between younger and older patients.

**Methods:** A prospective observational study of consecutive patients undergoing elective colorectal surgery in one unit. Data collected from 64 patients from June to October 2013. All patients were managed post operatively as per ERAS protocols. All relevant data including, post op mobilisation, re-admission rate, morbidity, length of stay, etc. were analysed and compared between two groups. Group 1 included older patients aged above 65 years and Group 2 included aged 65 years and below.

**Results:** Group 1 (Age≥65) included 44% (n = 38) patients, mean age 72(range: 66 to 82) years. Group 2 (Age<65) had 56% (n = 36) patients mean age 49 (range: 20 to 65) years (p = 0.02). Overall; Median hospital stay was 8 (range: 3 to 25) days. Inter-group analysis: There was no significant difference between the two groups (Group1 vs. Group2) on...
Comparison; switching to oral analgesia (p=0.344), removal of catheter (p=0.739), post op mobilisation (0.795), re-admission rate (p=0.577) post-operative complications, 32% vs 47 (p=0.223) and length of hospital stay; 7 vs 8 days (p=0.183).

Conclusions: This study supports the inclusion of older patients in ERAS programme in elective colorectal surgery.

0528: THE INFLUENCE OF SURGICAL SPECIALISATION ON SHORT AND LONG-TERM SURVIVAL FOLLOWING SURGERY FOR COLON CANCER
Raymond Oliphant 1*, Gary Nicholson 1, Paul Horgan 2, Donald McMillan 1, David Morrison 1. 1 University Department of Surgery, Glasgow Royal Infirmary, Glasgow, UK; 2 West of Scotland Colorectal Cancer Managed Clinical Network, Glasgow, UK; 3 West of Scotland Cancer Surveillance Unit, University of Glasgow, Glasgow, UK.

Introduction: To examine short and longer-term outcomes after colon cancer surgery performed by specialist colorectal surgeons compared to non-specialists.

Methods: Patients undergoing surgery for colon cancer in 16 hospitals from 2001-2004 were identified from a prospectively maintained regional audit database. Patients were identified as having surgery under the care of a specialist or non-specialist. Post-operative mortality (<30-days) and 5-year relative survival rates were compared.

Results: A total of 2618 patients were included, of which, 1724 (65.9%) were treated by a specialist and 894 (34.2%) by a non-specialist surgeon. Patients undergoing surgery by a specialist were more likely to be deprived, present electively, have more Stage I tumours, undergo surgery with curative intent and have ≥12 lymph nodes examined than those treated by a non-specialist surgeon. Post-operative mortality was lower (7.0% vs. 11.4%; P<0.001) and 5-year relative survival was higher (65.0% vs. 52.1%; P=0.001) among those treated by a specialist surgeon. In multivariate analysis, surgery by non-specialists was independently associated with increased post-operative mortality (adjOR 1.39 (95%CI 1.02-1.90; P=0.036)) and poorer 5-year relative survival (adjRER 1.17 (95%CI 1.01-1.36; P=0.035)).

Conclusions: Short and longer-term survival after surgery for colon cancer was higher in those treated by specialist colorectal surgeons compared to non-specialists.

0534: HALO — EARLY REVIEW OF PATIENT SATISFACTION
Ruth Graham1, Joy Singh, Andrew Doans. Clangwell General Hospital, Carmarthen, UK.

Introduction: To assess patient satisfaction following Haemorrhoidal arterial ligation operation (HALO).

Methods: All patients who underwent HALO between November 2012 and October 2013 in our institution were identified. Patients were asked to complete a telephone questionnaire in January 2014 on pre-operative symptoms, post-operative recovery and satisfaction with outcome.

Results: Of the 25 patients identified 21 (12 female, median age 52, (range 31-75)) were available to complete the questionnaire. Pre-operative symptoms included bleeding (95%), prolapse (62%), anal pain (57%) and pain on defaecation (57%). Post-operative medication included analgesia (100%), metronidazole (62%), lactulose (81%) and rectogesic ointment (24%). One patient required 24 hours catheterisation for retention and two patients required admission for treatment of sepsis.

All patients reported a longer than expected time to return to normal activities, however median time was 3 weeks, (range 1-10 weeks). All patients described improvement in symptoms between 70-92% however median time was 3 weeks, (range 1-10 weeks). All patients reported a longer than expected time to return to normal activities, however median time was 3 weeks, (range 1-10 weeks).

Conclusions: HALO results in a high level of patient satisfaction. Recovery time is longer than previously suggested.

0537: ONE-YEAR NEGATIVE APPENDICECTOMY RATE AT A DISTRICT GENERAL HOSPITAL
Jeffrey Lim, Queenie Pang*, Roderick Alexander. Great Western Hospitals NHS Foundation Trust, Swindon, UK.

Introduction: There is no defined ‘acceptable’ negative appendicectomy rate (NAR) in the UK. Previous studies indicate a NAR to be 12-34%. Despite advances in radiology and predictive scoring systems, appendicitis remains a clinical diagnosis but inevitably some patients will have an entirely normal appendix removed. We sought to define and compare our local practice.

Methods: A one year prospective observational study was performed in our institution on all appendectomies performed on an emergency basis. Cases were identified with the hospital electronic theatre record system and histopathology reports were retrieved and analysed.

Results: 390 patients were identified over a one year period. 127 patients’ appendices were found to be histopathologically normal, giving a NAR of 32.6%. Within this group, 19 patients (15%) had a re-admission within six months to hospital. Fisher’s exact test was used to compare our NAR to a recent large published series in 2013 (p=0.711).

Conclusions: Our negative appendicectomy rate is comparable to those previously published however, with a higher than expected re-admission rate (15%). Practice amongst our institutions’ surgeons is to remove the appendix should no other pathology be identifiable at laparoscopy or open exploration. Re-admission rates may put this practice into question.

0566: INTRODUCTION OF A DESIGNATED ERAS NURSE STILL HAS VITAL ROLE IN IMPROVING OUTCOMES
Janick Khan1, Claire McCutcheon, Mark Vella, Lyndsey Chisholm, Patrick Finn, Andrew Renwick, Susan Moug. Royal Alexandra Hospital, Paisley, UK.

Introduction: In ERAS accelerated care pathways are delivered using a multidisciplinary approach however the role of designated ERAS nurse has not been analysed. The aim of this study was to compare outcomes prior to and after introduction of ERAS nurse.

Methods: This was an observational study performed at one colorectal unit. Initially there was no designated nurse to monitor ERAS protocols. From June 2013 a designated full time ERAS nurse was introduced. Two sets of data were compared; Group 1 (Pre-ERAS nurse); March-May 2013 (3 months), Group 2 (Post-ERAS nurse); June-October 2013 (5 months).

Results: A total of 100 consecutive patients were analysed. Group 1: 36 patients; Group 2: 64 patients. Mean ages were: Overall; (62 (range:20-93) years, Group 1: 66 (range:44-93) years and Group 2: 59 (20-82) years. Median length of stay was: Overall; 8 (range:3-36) days, Group 1: 9 (range:3-36) days and Group 2: 8 (range:3-25) days. Re-admission rate was 8% (n=3) in Group 1 and in Group 2 it was 4.7% (n=3). Data collection was superior in Group 2; number of variables (9 vs 22) and fully completed data (44% vs 88%).

Conclusions: In an established programme of ERAS, introduction of a designated ERAS nurse has very important role, in addition to optimising data collection it also reduces re-admission rate and potentially reduces cost.

0571: COMPARING THE CORRELATION OF FAECAL CALPROTECTIN AND MRI ENTEROGRAPHY IN ASSESSING DISEASE ACTIVITY IN PATIENTS WITH SUSPECTED INFLAMMATORY BOWEL DISEASE
Anokha Oonman*, Buddika Jayathilaka, Mark Owen. Withybush General Hospital, Haverfordwest, UK.

Introduction: To assess the diagnostic accuracy of a raised faecal calprotectin by comparing it with MRI enterography findings to assess if there is a correlation between the two in patients with known/suspected inflammatory bowel disease.

Methods: In this retrospective study we looked at consecutive patients who had faecal calprotectin tests and MRI enterography for gastrointestinal symptoms between the period of September 2011 and August 2013. Severity of bowel wall inflammation was assessed by noting the presence, degree and length of inflammation. We also assessed wall thickness, transmural thickness and presence of structuring, mesenteric oedema and fistula formation. This was graded between 0 to 3 (0= absent, 1= mild, 2= moderate, 3= severe).

Results: In total there were 363 number of patients who had a faecal calprotectin test, out of which only 27 patients had been investigated with MRI enterography, 55.6% (13/27) of the patients testing positive had an organic diagnosis on further investigation. In the patients who were investigated with an MRI enterography 18.5% (5/27) of patients had severe bowel inflammation (grade 3) which corresponded to a mean faecal calprotectin of >300 μg/g.