

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 LONGER-TERM SURVIVAL FOLLOWING SURGERY FOR COLON CANCER

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**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  $\geq 12$  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 (adjusted OR 1.39 (95%CI 1.02-1.90;  $P=0.036$ )) and poorer 5-year relative survival (adjusted RER 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

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**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-operatively 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 and between 70-92% described complete improvement in specific symptoms. Two patients reported recurrence with one requiring a further procedure.

All patients reported improvement in quality of life (71% complete improvement). 100% of patients would recommend the procedure but requested more detailed information of post-operative symptoms and recovery.

**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

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**Introduction:** There is no defined 'acceptable' negative appendectomy 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 retrospective 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 appendectomy 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

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**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 (3months),

Group 2 (Post-ERAS nurse); June-October 2013 (5months).

**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 (range3-36) days, Group 1; 9 (range3-36) days and Group 2; 8 (range3-25) 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 98%).

**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

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**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  $>300 \mu\text{g/g}$ .

**Conclusions:** The data shows that higher values of faecal calprotectin correspond to an increased degree of mucosal inflammation.

#### 0602: APER IN A DISTRICT GENERAL HOSPITAL – SHOULD WE BE DOING MORE?

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**Introduction:** Appropriate surgical management of rectal cancer is crucial to survival. The decision for abdominoperineal excision of rectum (APER) goes against surgical inclinations to engineer an anastomosis with a low anterior resection (LAR). Inappropriately optimistic surgical decisions are known to foster high local recurrence rates and poor overall survival. We aimed to inspect the APER rate and outcomes of patients with rectal cancer in our centre.

**Methods:** A prospectively maintained departmental database was interrogated to determine all patients undergoing AR or APER between 1/1/2008–31/12/2010. Recurrence was identified on post-operative CT scans at 2 years.

**Results:** Patients underwent an APER 16% n=14 or AR 84% n=69. The overall average age was 71. Male to Female ratio 1.6:1. One of the LAR patients had local recurrence (1.5%) at 2 years whilst there was no evidence of recurrence in the APER group. Distant metastases were identified in 14% of the APER group vs. 5.9% in the LAR group. Nil significant difference in recurrence rates (P-value <0.05).

**Conclusions:** Our centre's APER rate of 16% is favourably comparable to the established literature recommending <30%. The surgical rationale in our unit is supported by the low and comparable risk of recurrence for both LAR and APER at 2 years.

#### 0616: SURGICAL APPROACH TO INFLAMMATORY BOWEL DISEASE IN TAYSIDE, EAST OF SCOTLAND

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**Introduction:** To investigate the surgical approach to IBD in Tayside and to compare it with literature findings. This will hopefully help to elucidate the gold standard operations in the management of IBD and its true extent in practice.

**Methods:** 97 patient notes from Medical-Records were systematically reviewed. A standard template was used to collect certain information, e.g. diagnosis, part of bowel affected, surgical treatment, complications, and functional outcome.

**Results:** The most common type of surgery performed in CD was a right hemicolectomy, RHC (64.9%), followed by a subtotal colectomy, STC (24.6%). Complications such as strictures (18.6%), adhesions (8.1%), perforation (5.4%) and obstruction (5.4%) affected the outcome in RHC, but not STC. With RHC, disease recurrence and re-operation rates were 35.1% and 51.4% respectively compared to 14.2% and 35.7% with STC. UC patients: 92.3% underwent STC-with-end-ileostomy. Following STC, two-thirds had either IPAA (64.7%) or TPC (35.3%). Complications with IPAA included pouchitis (36.4%), sepsis (18.2%), pouch failure (16.7%) and haemorrhage (16.7%), whereas an ileostomy only had wound infection (16.7%).

**Conclusions:** Segmental resection in CD has been controversial as it carries a higher recurrence-rate but has all the functional benefits of colonic preservation. STC has higher complication rates compared to RHC from sepsis, wound infection and poor stoma function. Despite complications, IPAA still offered the closest thing to faecal continuity without the use of a stoma bag.

#### 0621: ACTIVATED SYSTEMIC INFLAMMATORY RESPONSE AT DIAGNOSIS REDUCES LYMPH NODE COUNT IN COLONIC CARCINOMA

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**Introduction:** Prognosis following resection for colon cancer improves with higher lymph node yields. Pre-operative markers of systemic inflammation also affect prognosis, a finding largely explained by an immunogenic response to cancer. We hypothesise that lymph node count and systemic inflammatory response (SIR) are linked.

**Methods:** A prospectively maintained database was interrogated. All patients undergoing curative colonic resection were included. Neutrophil

lymphocyte ratio (NLR) and albumin were used as markers of SIR. In keeping with previously studies, NLR  $\geq 4$ , Albumin  $<35$  was used as cut off points for SIR. Statistical analysis was performed using 2 sample t-test and chi square tests where appropriate. 302 patients were included for analysis. 195 patients had nlr  $<4$  and 107 had nlr  $\geq 4$ .

**Results:** There was no difference in age, sex or disease stage between groups. Patients with NLR of  $\geq 4$  had lower mean lymph node yields than patients with NLR  $<4$  (17.6  $\pm$  7.1 vs. 19.2  $\pm$  7.9 (P=0.036)). Patients with hypoalbuminaemia at diagnosis tended towards lower lymph node yields.

**Conclusions:** Prognosis in colon cancer is intimately linked to the patient's immune response. Assuming standardised surgical technique and sub speciality pathology, lymph node count is reduced when systemic inflammatory response is activated.

#### 0635: DO ELDERLY PATIENTS WITH COLORECTAL CANCER BENEFIT FROM RESECTION? RESULTS FROM A TERTIARY CARE CENTRE

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**Introduction:** An aging UK population has led to an increase in the number of elderly patients presenting with colorectal cancer. The aim of this study is to evaluate the survival outcome in elderly patients undergoing colorectal resection.

**Methods:** All patients over the age of 80 years diagnosed with colorectal cancer between January 2009 and December 2011 were identified from the Cancer database. Information about the treatment details was retrospectively obtained from the electronic information system.

**Results:** During this period, 197 patients aged 80 or above were diagnosed to have colorectal cancer. 96 patients were females and 101 were males. 90 patients did not undergo surgery, 68 had a curative resection, 28 had palliative resection and 11 patients had a defunctioning stoma. The mean survival period decreased with age. Patients who underwent curative resection had the longest survival followed by those with palliative resection and those managed non-operatively (1121, 602 and 44 days respectively). A similar trend was noted when this cohort was stratified according to age.

**Conclusions:** Elderly patients have an improved survival outcome with resection of a colorectal cancer. We therefore recommend that age should not be a deciding factor when making treatment decisions for elderly population.

#### 0638: TREATMENT OF PRE-OPERATIVE ANAEMIA IN PATIENTS UNDERGOING SURGICAL MANAGEMENT OF COLORECTAL CANCER; A RE-AUDIT

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**Introduction:** Pre-operative anaemia in colorectal cancer patients is common and poorly treated. Our aim was to re-audit our results after instituting a pre-operative iron infusion programme for elective colorectal cancer patients

**Methods:** This was a comparative review of patients undergoing elective colorectal cancer surgery in a single institution between 01/08/12 and 31/12/13. Data collected included patients age and sex, tumour location and stage, haemoglobin pre-operatively, type of operation, length of hospital stay, need for post-operative blood transfusion and treatment of anaemia.

**Results:** 117 patients underwent elective surgical management for colorectal cancer. 39 (33.3%) patients were anaemic pre-operatively; comparable with the original audit: 51/154 (33.6%). 22 (56.4%) of these patients received pre-operative treatment of their anaemia. This represented a significant increase in treatment rates compared with the original audit: 2/51 (4%) (p<0.05). 28 (23.9%) patients required post-operative blood transfusions, 10 (35.7%) of whom were anaemic pre-operatively. There was no difference in blood transfusion requirement between anaemic and non-anaemic patients (25.6% vs. 23.1%; p= 0.759) or between treated and untreated pre-operative anaemia (35.3% vs. 18.2%; p=0.282).

**Conclusions:** Treatment of pre-operative anaemia in this institution has improved significantly. The introduction of a dedicated pre-operative intravenous iron infusion service has been beneficial.