#### Abstracts / International Journal of Surgery 36 (2016) S31-S132

### 0698: COMPLICATIONS FOLLOWING CLOSURE OF A DEFUNCTIONING LOOP ILEOSTOMY

A. Ewing <sup>1,\*</sup>, K. Brown <sup>2</sup>, M. Dunlop <sup>1, 1</sup>NHS Lothian, Edinburgh, UK; <sup>2</sup>The University of Edinburgh, Edinburgh, UK.

**Aim:** Defunctioning loop ileostomy (DLI) is widely used as a component of various resectional procedures to reduce or ameliorate anastomotic leakage. However, the effectiveness of routine DLI remains unproven and reversal is associated with procedure-specific complications and hospital stay. We aim to describe the nature, rate of complications and hospital stay after DLI closure.

**Method:** The department database was queried and charts reviewed for all patients who underwent DLI closure in the 12-year period from January 2004 to November 2015.

**Result:** There were 421 patients who underwent DLI closure (median age 61 yrs, range 17-98yrs). Length of hospital stay after lleostomy closure was 0-17 days, median = 8 days with a total bed usage of 3423 days. Significant complications arose in 79 patients (18.76%) with 14 requiring re-operative intervention (3.33%). 33 developed a post-operative ileus. C. difficile infection arose in 9 cases and MRSA in 5. 17 patients were re-admitted with a total stay of 48 nights.

**Conclusion:** This study describes an appreciable morbidity (18.76%) and bed-day requirement associated with DLI closure. The findings inform discussion around the role and value of defunctioning ileoanal and coloanal anastomosis. The findings also provide useful data in the consideration of an appropriately-powered RCT of ileoanal and coloanal anastomosis.

### http://dx.doi.org/10.1016/j.ijsu.2016.08.156

### 0709: DESMOID TUMOURS AND FAMILIAL ADENOMATOUS POLYPOSIS: OUR ROYAL EXPERIENCE

E. Kane <sup>1,\*</sup>, E. Garforth <sup>1</sup>, R. Heath <sup>1</sup>, A. Fryer <sup>2</sup>, P. Rooney <sup>1</sup>, <sup>1</sup>Department of Colorectal Surgery, Royal Liverpool University Hospital, Liverpool, UK; <sup>2</sup>Department of Genetics, Liverpool Women's Hospital, Liverpool, UK.

**Aim:** Desmoid tumours are rare, non-metastasising fibromatoses that affect 8-23% of patients with FAP and occur more frequently in females, with mutations of the APC gene beyond codon 1309 and with previous abdominal surgery. We aimed to evaluate our management of patients with FAP and desmoid tumours.

**Method:** Patients with FAP and desmoid tumours on our colorectal database were identified. Information regarding APC mutation location and clinical management were collected and analysed.

**Result:** There are 41 patients with FAP (25 female, 16 male), ten with desmoid tumours. Median age at diagnosis was 33 (R = 8-49). All had undergone colectomy (eight prophylactically, two for malignancy). Three abdominal wall desmoids were excised. Seven patients have been managed conservatively with observation, chemoprophylaxis and ureteric stenting for managing complications of compression. All patients have been kept under surveillance. One patient died following bowel perforation and one from bowel obstruction. Genetic testing was performed on the majority but specific mutational analysis was available for only 67% of patients with FAP.

**Conclusion:** Our results show that our patients are being managed appropriately but knowledge of location of germline mutation is strongly advised prior to offering prophylactic colectomy and management of solid desmoid tumours.

http://dx.doi.org/10.1016/j.ijsu.2016.08.157

### 0770: SYSTEMATIC REVIEW AND META ANALYSIS OF PUBLISHED TRIALS COMPARING THE EFFECTIVENESS OF TRANSANAL ENDOSCOPIC MICRO-SURGERY TEMS AND ENDOSCPIC SUBMUCOSAL DISSECTION ESD IN THE MANAGEMENT OF EARLY RECTAL CANCER T1,T2

Y. Rajjoub <sup>1,\*</sup>, N. Saffaf<sup>2</sup>, H. Barr <sup>1, 1</sup> Cheltenham General Hospital, Cheltenham, UK; <sup>2</sup> Birmingham Heartlands Hospital, Birmingham, UK.

Aim: compare the safety and effectiveness of TEMS and ESD for early rectal cancer.

**Method:** Electronic search of Medline, Embase, Pubmed , Up to date and Chocrane Library was done.

**Inclusion criteria**: comparative published trials. Patients with early rectal cancer T1, T2. Quality was assessed (Newcastle-Ottawa Scale and the Cochrane Collaboration's Risk of bias tool). Revman 5.3 was used for statistical analysis .Odd Ratio with a 95% confidence interval was calculated for binary data. Standardized mean difference with a 95% CI was calculated for the continuous data .Heterogeneity was explored using  $X^2$ .

**Result:** Only two retrospective trials including 87 patients met the inclusion criteria : Park et al. 2012, Kawaguti et al. 2013. There was a higher risk of perforation with ESD .The En block resection rate was slightly higher with ESD. The R0 Resection rate was almost the same between the two groups. Operation time was shorter in ESD group. No difference in the total length of stay between two group. The recurrence was only reported in Kawaguti trial and it was higher in ESD Group.Most TEMS patients needed GA (86%), compared to ESD group 9 patients (22%).No mortality or bleeding in both studies.

**Conclusion:** ESD is of slight higher perforation risk than TEMS. It was also accompanied with small higher risk of recurrence.

http://dx.doi.org/10.1016/j.ijsu.2016.08.158

### 0775: SYSTEMATIC REVIEW AND META-ANALYSIS OF MESH IMPLANTA-TION DURING PRIMARY STOMA FORMATION TO PREVENT PARASTO-MAL HERNIA

S.J. Chapman<sup>1,\*</sup>, B. Wood<sup>1</sup>, T.M. Drake<sup>2</sup>, N. Young<sup>1</sup>, D.G. Jayne<sup>1, 1</sup> University of Leeds, Leeds, UK; <sup>2</sup> University of Sheffield, Sheffield, UK.

**Introduction**: Parastomal hernia (PH) is common after gastrointestinal stoma formation. Mesh implantation during primary surgery may reduce the incidence of PH, but until recently the evidence has been limited to few, low-volume randomised controlled trials (RCTs).

**Method:** MEDLINE, EMBASE and the Cochrane Library were searched between 2004-2015 for published RCTs testing mesh versus no mesh for prevention of PH. Sixteen international trial registries were inspected for ongoing trials. Meta analysis was performed on incidence of PH at least 12 months after stoma formation. Secondary outcomes included rates of stoma-related complications and presence of ongoing trials.

**Result**: Of 2933 studies identified, 6 RCTs (380 patients) underwent metaanalysis. All RCTs were high risk of bias. The incidence of PH was reduced with mesh (10.8% versus 32.4%; P = 0.001) (RR: 0.34, CI: 0.18–0.65,  $I^2 = 39\%$ ). Mesh was associated with fewer repairs (2.1% versus 9.7%; P = 0.02) (RR: 0.33, CI: 0.13–0.82,  $I^2 = 0\%$ ) and did not increase the incidence of stoma-related complications. Results from ongoing RCTs are awaited, but few will assess newer mesh types or alternative surgical techniques.

**Conclusion**: Mesh implantation at time of stoma formation appears safe and effective in preventing PH. Low event rates and limitations of primary evidence still implicate larger, more rigorous RCTs.

http://dx.doi.org/10.1016/j.ijsu.2016.08.159

## **0791:** QUANTIFYING QUALITY OF LIFE (QOL) OF PATIENTS TREATED WITH BOTOX FOR CHRONIC ANAL FISSURE

A. Bagul<sup>\*</sup>, F. McNicol, P. Carter. Royal Liverpool and Broadgreen University Hospital, Liverpool, UK.

**Background:** Anal fissures represent 10% of colorectal clinic referrals. Chronicity is defined as a fissure persisting for >6 weeks despite medical treatment. The hypothesis is that chronic fissures have a raised resting anal pressure from internal anal sphincter hypertonicity. Medical treatment is first line . Resistant cases are offered Botulinum Toxin or lateral internal Sphincterotomy. Sphincterotomy produces good healing rates but is associated with incontinence in up to 30% in long term follow up. Meta

analysis suggests medical treatment is safe for chronic anal fissure and reserves surgery for treatment failure.

**Method:** This observational study over 2 years analysed outcome measures on patient symptoms and QOL scores. The QOL scores were recorded before and after respective procedure using SF 36 QOL Assessment Form . **Result:** The median age was 48(28–77) years. 95.83% patients completed the SF-36 form. This revealed that their quality of life improved significantly in physical functioning, pain, social functioning and mental health. **Conclusion:** QOL data is rarely acquired in surgery so adds new knowledge to the study by using available tools to assess QOL in patients undergoing surgical treatment. Our study shows improvement in the QOL in patients treated with Botox for chronic anal fissure at follow up.

http://dx.doi.org/10.1016/j.ijsu.2016.08.160

### 0830: EXTENDED VTE PROPHYLAXIS AFTER COLORECTAL CANCER SUR-GERY – WHERE'S THE EVIDENCE?

C. Sproson<sup>1,\*</sup>, M. Lee<sup>1</sup>, R. Kallam<sup>2</sup>. <sup>1</sup>Sheffield Teaching Hospitals NHS Foundation Trust, South Yorkshire, UK; <sup>2</sup>Northern Lincolnshire and Goole NHS Foundation Trust, Lincolnshire, UK.

**Background:** NICE recommends extending pharmacological thromboprophylaxis to 28-days postoperatively following abdominopelvic cancer surgery. This is based on a 2009 Cochrane Review, which used data over a decade old and compared extended thromboprophylaxis with placebo. In current practice, where a minimum of in-hospital pharmacological thromboprophylaxis is standard, is there evidence to support extended prophylaxis following colorectal cancer surgery?

**Aim:** To report current incidence of post-discharge symptomatic VTE in patients receiving only in-hospital pharmacological thromboprophylaxis after colorectal cancer surgery.

**Method:** Two reviewers conducted a systematic review of the PubMed Database using PRISMA guidelines. To ensure assessment of contemporary data, only articles published after the 2009 Cochrane Review were included.

**Result:** Initial search identified 50 abstracts. Final analysis included four articles: one RCT and three retrospective cohorts. Data for 682 patients revealed an incidence of 0.7% post-discharge symptomatic VTE at 30-days post colorectal cancer surgery.

**Conclusion:** Current evidence suggests low incidence of post-discharge symptomatic VTE following colorectal cancer surgery. The benefit of extending thromboprophylaxis is therefore questionable. In-hospital thromboprophylaxis, enhanced recovery protocols and modern surgical techniques have likely out-dated the evidence upon which national recommendations are based. A well-powered RCT comparing in-hospital with extended thromboprophylaxis is necessary to inform revised national recommendations.

### http://dx.doi.org/10.1016/j.ijsu.2016.08.161

### 0871: EFFECTIVENESS OF THE BRITISH SOCIETY OF GASTROENTER-OLOGY GUIDELINES FOR SURVEILLANCE COLONOSCOPIES ON COLONIC ADENOMAS

S. Chandramoorthy <sup>1,\*</sup>, P. Soor <sup>2</sup>, M. Wall <sup>3</sup>, R. Ransford <sup>2</sup>, E. Leung <sup>3</sup>. <sup>1</sup>*Hull* York Medical School, York, UK; <sup>2</sup>St Georges University of London, London, UK; <sup>3</sup>University of Birmingham, Birmingham, UK.

**Introduction:** The British Society of Gastroenterology (BSG) has set clear guidelines on surveillance colonoscopy for adenomatous polyps. This study aims to determine if these guidelines were adhered to in an accredited unit.

**Method:** All patients who underwent surveillance colonoscopies between October 2014 and 2015 were retrospectively included. Information relating to polyp number, size, and histology were collected and their subsequent schedule colonoscopy was then compared with the BSG guidelines. **Result:** Out of the 106 cases detected, 62% (66/106) were not compliant to the BSG guidelines (p>0.05). 49% (52/106) of the cases were requested by gastroenterology of which 62% (32/52) were not compliant to the BSG guidelines and on average were requested 35.4 months earlier than scheduled. 51% (54/106) of the cases were requested by surgery of which 59% (32/54) were not compliant to the BSG guidelines and on average were requested by surgery of which 59% (32/54) were not compliant to the BSG guidelines and on average were requested 36.5 months earlier than scheduled.

**Conclusion:** Too many surveillance colonoscopies were performed in our unit and in around 60% cases nearly three years earlier than required. Targeting the reasons for non-compliance could potentially reduce workload and improve efficiency in an over-stretched colonoscopy unit.

http://dx.doi.org/10.1016/j.ijsu.2016.08.162

# 0883: OUTCOMES OF EMERGENCY LAPAROSCOPIC COLONIC RESECTION: A SINGLE CENTRE EXPERIENCE

K. Mccoll<sup>2,\*</sup>, A. Amer<sup>1</sup>, P. Ainley<sup>1</sup>, K. Shahi<sup>1</sup>, D. Borowski<sup>1</sup>, D. Garg<sup>1, 1</sup>North Tees and Hartlepool NHS Foundation Trust, Stockton on Tees, UK; <sup>2</sup>Newcastle University, Newcastle upon Tyne, UK.

**Introduction:** Laparoscopic colonic resection in the emergency setting has not been met with comparable enthusiasm as that in the elective setting. We describe the 5-year experience of emergency laparoscopic colonic resection at a single colorectal unit.

**Method:** Data for emergency laparoscopic colonic resections was collected from a prospectively-maintained database for a single surgeon at a colorectal unit between 2010–2015. Outcomes were compared to average data for emergency open colonic resection within the department.

**Result:** A total of 66 patients were included in this study with a median age of 62 years. Average operating time was 190 minutes (compared to 144 minutes for open emergency resections). The conversion rate to open resection was 9%. Intraoperative complications occurred in 6% of cases and included bleeding and bowel injury. Postoperative complications (30-day) were mainly infective and occurred in 13.6% of cases. No anastomotic leaks were identified in this cohort. Median postoperative stay was 6 days compared to 7 days for open surgery. For malignant colonic pathology, R1 resections occurred in 9.5% of cases and median lymph node yield was 20. **Conclusion:** Our data confirms the feasibility and safety of colonic resection surgery in the emergency setting for benign and malignant disease.

http://dx.doi.org/10.1016/j.ijsu.2016.08.163

### 0910: THE INCIDENCE AND IMPLICATIONS OF INTESTINAL INJURY IN LAPAROSCOPIC COLORECTAL SURGERY

P. Chaichanavichkij<sup>\*</sup>, T. Killeen, K. Aryal. James Paget University Hospitals NHS Foundation Trust, Great Yarmouth, UK.

**Aim:** Intestinal injury (II) is a recognised complication of laparoscopic surgery in general, there is little evidence on the actual incidence of II in laparoscopic colorectal surgery (LCS). This study investigates the incidence and consequences of II in LCS.

**Method:** A systematic literature search was conducted through PubMed, Ovid, and the Cochrane Database to identify primary studies in the English Language which reported incidence of II in LCS for benign and malignant diseases between January 2000 and October 2015. Information on demographics, operative characteristics, previous abdominal surgery, conversion rate, and II was extracted from the selected studies.

**Result:** Forty-three studies were included, pertaining to 29600 patients. The overall intra-operative complication rate was 5.7% (n = 1297/22931), conversion rate was 8.6% (n = 2351/27368), and mortality rate was 1.0% (n = 297/28943).

II occurred in 365 patients (1.2%) and forms 28.1% of all intra-operative complications. The majority of injuries were diagnosed intra-operatively (98.6%, n = 360), of which 11.4% (n = 41) required conversion to open surgery. Among the 1.4% (n = 5) of II diagnosed post-operatively, 60% (n = 3) died.