

**0269: GASTROINTESTINAL STROMAL TUMOUR OF THE RECTUM: A REVIEW OF SURGICAL TREATMENT, OUTCOMES AND THE ROLE OF IMATINIB**

M.J. Wilkinson, J.E.F. Fitzgerald, D.C. Strauss, A.J. Hayes, J.M. Thomas. *The Royal Marsden Hospital NHS Foundation Trust, London, UK*

**Aims:** Gastrointestinal stromal tumours (GISTs) of the rectum are rare, accounting for only 0.1% of all rectal tumours. This study investigates the presentation, management and outcomes of rectal GISTs at a specialist unit.

**Methods:** Retrospective cohort study analysing a prospectively maintained database at a tertiary referral centre from Jan 2001 - Jan 2012.

**Results:** A total of 14 patients (6 female, 8 male), presented with a primary rectal GIST. Commonest presenting symptoms were rectal bleeding (n=6) and tenesmus (n=6). Median tumour size at presentation: 8cm (range 2 - 12cm). 12 patients received neoadjuvant imatinib; median reduction in tumour size 2.8cm (range 0.5 - 5.6cm); p = 0.001. Surgical resection was performed in 6 of the 14 patients (2 patients declined surgery and 6 are continuing imatinib to downsize). Complete macroscopic clearance was obtained in 100% of patients. On follow up, 12 patients are alive without metastases: median follow-up 31.3 months. There were 2 deaths from unrelated causes. The remaining 5 patients operated on are disease free (median DFS = 36.2 months).

**Conclusions:** Biopsy is essential in establishing the diagnosis. Neoadjuvant imatinib substantially downsizes rectal GISTs which may permit less invasive surgery. Favourable outcomes can be achieved for rectal GISTs in specialist centres.

**0283: A PROPOSED STANDARD FOR PRE-OPERATIVE LAPAROSCOPIC COLORECTAL CANCER RESECTION ENDOSCOPIC TATTOOING. IDENTIFICATION OF MODIFIABLE PRACTICES AT AN ENHANCED RECOVERY CANCER CENTRE**

Ajay Sud, Arkeliana Tase, Elinor Baker, Santanu Bhattacharjee, Shiva Dindyal, Stefano Andreani. *Whipps Cross University Hospital, London, UK*

**Aims:** The National Bowel Cancer Screening Program specifies a 100% target for tattooing of suspected malignant lesions. There remains no all-inclusive guideline for colorectal tattooing. We aim to identify factors contributing to suboptimal practice.

**Methods:** The data collected incorporated retrospective analysis of all 144 colorectal surgery patients at Whipps Cross Hospital whom underwent oncological colorectal resections for ten months from January 2008 and six months from June 2010.

**Results:** In 2008 and 2010, 39% and 52% respectively, of our patients received pre-operative tattooing. In 2008 and 2010, 30% and 50% respectively of lesions were only documented to be distally tattooed. The mean number of days between their pre-operative endoscopy to surgery in 2010 was 69 days. In 2008 consultant gastroenterologists tattooed 70% of suspect lesions, but by 2010 this reduced to 36%. Only 40% were underwent solely distal tattooing, and 22% of ulcerating lesions were tattooed.

**Conclusions:** Surgeons are the direct recipients of suboptimal tattooing. They are best placed to lead the colonoscopy community to ensure efficacious tattooing practices, enabling optimal uncomplicated oncological resection. The standard for practice should be a recent distal '360-degree' tattoo with one vial per 30 degrees, to all suspicious lesions, irrespective to the endoscopic morphology.

**0316: IROBOT - INITIALIZING A ROBOTIC COLORECTAL SERVICE**

Faira Eldriana Rizal, Benjamin Stubbs, P. Mathur, Colin Elton, Daren Francis. *Department of Coloproctology, Barnet and Chase Farm Hospital, London, UK*

**Aims:** Robotic surgery has potential advantages in the difficult pelvis, however use in coloproctology has been limited. We describe our early experience.

**Methods:** 3 colorectal surgeons gained certification as console surgeons on the da Vinci robot and a mentoring programme was undertaken with an experienced robotic colorectal surgeon. (2 anterior resections at the mentor's hospital followed by 2 ventral mesh rectopexies performed at our trust.) Data was collected prospectively on all cases performed over 1 year.

**Results:** 12 robotic colorectal procedures were performed (6 ventral rectopexies, 5 anterior resections and 1 ultra-low Hartmann's). No

intra-operative complications occurred, with one conversion to open surgery. Mean operative times were: mesh rectopexy 270 minutes (range 205-310), anterior resection 366 minutes (304-408) and Hartmann's 355 minutes. Mean length of stays were: ventral rectopexy 2 days (range 1-3), anterior resection 7.6 days (5-10) and Hartmann's was 8 days. 1 post-operative ileus occurred with no other post-operative complications. All patients with rectal cancer had good oncological clearance on histology.

**Conclusions:** Initiation of a robotic colorectal service is a safe and feasible option within a supervised mentoring programme. We anticipate an improvement in operating time with increased experience, however further studies into economic viability are needed.

**0324: FAMILIAL ADENOMATOUS POLYPOSIS RELATED DESMOIDS PRESENTING WITH AIR-FLUID LEVEL - A CLINICAL REVIEW AND MANAGEMENT ALGORITHM**

Santosh Bhandari, Pravin Ranchod, Ashish Sinha, Arun Gupta, Susan Clark, Robin Phillips. *St Mark's Hospital, Harrow, Middlesex, UK*

**Aim:** Familial adenomatous polyposis (FAP) related desmoid tumors (DT) can present with a liquefied centre containing gas, accompanied by abdominal pain and sepsis. We present our experience of managing these desmoids grouped together as 'intra-abdominal desmoids (IAD) with air-fluid level'.

**Material and methods:** Retrospective review of prospectively maintained polyposis registry database was conducted at a tertiary referral centre specializing in FAP and desmoid disease.

**Results:** A total of nine patients had an IAD with air-fluid level, seven were female. Age range at diagnosis was 20-41 years. The median time taken from primary surgery to DT development was 24 months (range 0 - 48 months), and the median time for further progression to air-fluid level was 24 months (range 0 - 226 months). DT size ranged from 10cm to greater than 20cm in diameter. Two patients were successfully managed with antibiotics alone, and two patients with percutaneous drainage and antibiotics. The other five patients required surgical intervention involving either excision or drainage with or without proximal defunctioning/exclusion.

**Conclusions:** The majority of IAD patients with an air-fluid level require surgical intervention. Antibiotics and percutaneous drainage are only successful in a limited number of patients. We present our current treatment algorithm based on this experience.

**0362: LOCAL RECURRENCE (LR) RATES AFTER OPERABLE RECTAL CANCER SURGERY**

Robert Nadler, Daniel Brown, Sue Hignett, Carol Makin, Goldie Khera. *Wirral Hospital, Liverpool, UK*

**Aims:** LR rates following curative resection have been reported to be between 2.4 - 50% with LR rates hypothesised to be higher for abdominoperoneal resection (APR) vs anterior resection (AR). We analysed our LR rates over an 11 year period

**Methods:** Between 1999 and 2010, 312 patients with operable rectal cancer (<15cm from the anal verge) were followed up to determine local or regional recurrence. Total Mesorectal Excision (TME) principles were adhered to, together with tailored neo and adjuvant chemo-radiotherapy protocols.

**Results:** Age range 38 - 98 years, 60% male, follow-up for up to 11 years. Rates of APR were 23%, AR 56% and Hartmann's 8%. Total LR rates were 5%. In those developing LR, distance from the anal verge was 2-15cm (median 6cm), with AR being performed as low as 3cm. The distant recurrence rates were 18%.

**Conclusions:** Concerns have been raised in the Association of Coloproctology of Great Britain and Ireland guidelines regarding the plane of dissection and potentially higher recurrence rates in APR vs AR. Our study demonstrates however, that with the TME technique both APR and ultra-low AR can be performed with low LR, highlighting the importance of specialist rectal surgeons in cancer surgery.

**0384: LAPAROSCOPIC TECHNIQUES MAY MINIMIZE THE SHORT-TERM IMPACT OF REPEATED SURGICAL RESECTION IN THE MANAGEMENT OF CROHN'S DISEASE**

Christopher Whitfield, Richard Slater. *Rotherham NHS Foundation Trust, Rotherham, UK*

**Introduction:** Multiple surgical resections may be necessary in chronic Crohn's disease management. Laparoscopic techniques offer a minimally invasive approach. The 5-year experience of a Consultant Colorectal Surgeon in a District General Hospital is described. Short-term outcomes of elective laparoscopic procedures are emphasized.

**Methods:** Patient and operative data were extracted from a prospective database for the period November 2007 to November 2011.

**Results:** 14 elective laparoscopic procedures were performed on 13 patients (7 male, 6 female) with Crohn's disease. Median age was 42.8 years (range 17.3–68.9 years). The procedures comprised: 11 right-hemicolectomies, 1 sigmoid-colectomy and 2 ileostomy reversals. 5 were repeat resections for recurrent disease at the ileo-colic junction. Prior ileo-colic resection had occurred in 4 patients, (6 prior resections in 1 patient, 3 in 1 patient and 2 in 2 patients). Open conversion occurred in 1 patient, who had undergone a prior resection. One anastomotic leak (1/14, 7.1%) occurred, following primary right-hemicolectomy. Median length of stay in the resection group was 6.5 days (range 2–11 days). No post-operative deaths occurred.

**Conclusion:** Laparoscopic techniques may be routinely applied to the surgical management of Crohn's disease; this includes patients requiring repeated resections in chronic disease, without significant additional morbidity.

**0496: AUDIT OF LYMPH NODE HARVEST DURING BOWEL RESECTION FOR COLORECTAL CANCER**

Kersten Morgan-Bates, James Berwin, Santosh Kumar Somasundaram, Georgios Akritidis, Olagunju Ogunbiyi. *Royal Free hospital NHS Trust, London, UK*

**Aims:** To perform an audit of lymph node (LN) harvest, an independent prognostic factor for 5 year survival, during colorectal resections. The National Bowel Cancer Audit in 2010 identified that the median number of LNs excised with the specimen should be 15 for colonic cancer and 13 for rectal cancer.

**Methods:** Retrospective analysis of prospectively collected data was performed of all eligible patients between January 2010 and August 2011 (20 months).

**Results:** A total of 177 patients were diagnosed with colorectal cancer during this study period. 72 patients were excluded for a variety of reasons, but predominantly for metastatic disease (47). Results from 105 patients are reported. 93 patients had colon cancer resections. 55 (59.1%) of these patients had more than 15 LNs excised with the specimen. LNs were positive in 43 (46.2%). 12 patients underwent surgery for rectal cancer. 9 (75%) of these patients had 13 or more lymph nodes excised with the specimen. LNs were positive in 4 (33.3%).

**Conclusions:** In a majority, the LN yield following colorectal resection at our centre was above the National average for rectal and colonic cancers in this study period, but the surgical technique needs to improve for colonic resections and a re-audit performed.

**0540: LARGE BOWEL OBSTRUCTION CAN BE SAFELY TREATED BY COLONIC STENT INSERTION - CASE SERIES FROM A UK DISTRICT GENERAL HOSPITAL**

Paul Blake<sup>1</sup>, Ray Delicata<sup>2</sup>, Nicholas Cross<sup>2</sup>, Graham Sturgeon<sup>2</sup>, Rachel Hargest<sup>1</sup>. <sup>1</sup>University Hospital of Wales, Cardiff, UK; <sup>2</sup>Nevill Hall Hospital, Abergavenny, UK

**Aim.** The aim of this study is to audit our outcomes and experience of colonic stent insertion for malignant bowel obstruction.

**Methods.** Retrospective audit of all stent insertions in a single district general hospital between August 2003 and December 2009. All patients had presented with acute bowel obstruction caused by malignant colorectal disease. Details were collected prospectively and contemporaneously onto a database. Stent insertion was a combined endoscopic and fluoroscopic procedure involving a colorectal surgeon and consultant radiologist.

**Results.** Stenting was attempted on 62 occasions in 54 patients. The technical success rate was 86% and clinical success rate 84%. The indications for stenting were relief of acute bowel obstruction, palliation and as a bridge to surgery. There were complications in fourteen cases (22.5%) including three perforations and one perioperative mortality. There were three cases of stent migration, six cases of re-stenosis and two stents became impacted with stool. There were no incidents of acute or delayed haemorrhage in any patients.

**Conclusion.** Our experience shows that stenting for obstructing colorectal cancer is a safe and effective method of alleviating acute and impending bowel obstruction and can be provided safely and effectively in a district general hospital.

**0560: ANTEGRADE COLONIC ENEMA IN ADULT PATIENTS: A SINGLE SURGEON SERIES**

Mohammed Hamdan, Andrew Gee. *Department of Colorectal Surgery, Royal Devon and Exeter Hospital NHS Foundation Trust, Exeter, UK*

**Aim:** The antegrade colonic enema (ACE) procedure is a minimally invasive treatment for refractory constipation. 47–83% success rates have been reported. The aim of this study is to demonstrate the outcome of patients who underwent the ACE procedure in a district general hospital.

**Methods:** Retrospective review of all patients who underwent the ACE procedure for refractory constipation between February 2002 and June 2011. Demographic, operative and follow up data were recorded.

**Results:** A total of 12 female patients had the ACE procedure performed by a single colorectal surgeon. Median age was 43 (24–70) years. Median postoperative hospital stay was 6 (2–17) days. Median follow up was 36 (14–75) months. Conduit stenosis or leakage developed in 4 and 1 patients respectively requiring surgical revision. 1 patient developed an incisional hernia with subsequent poor conduit function ultimately managed with an end ileostomy. 2 failed to use the conduit and are now on laxatives. Excluding the latter 3, all patients are managing their constipation without laxatives.

**Conclusion:** The ACE procedure was successful in 75% of patients who were, thus, able to avoid more aggressive surgery. Patient education and compliance are essential to improve success rates.

**0566: CHEAPER DOES NOT NECESSARILY MEAN INFERIOR**

Stephen Magill, Sylvia Brown, Hoey Koh, Mark Vella, Patrick Finn, Lindsey Chisholm, Andrew Renwick. *Royal Alexandra Hospital, Paisley, UK*

**Aim:** A recent service change at one of our sites (site 2) saw the sole utilisation of endoscopic equipment from a cheaper manufacturer. Endoscopists favoured the more expensive equipment and thought that service quality may be affected. The objective of our study is therefore to evaluate the effect of change of equipment on service quality.

**Methods:** Data for 836 colonoscopies performed by three colorectal surgeons on both sites was prospectively collected.

**Results:** Overall completion rates were 89.9% at site 1 (n=490) and 92.2% at site 2 (n=346) [p=0.182]. Completion rates for each consultant also showed no significant differences.

The overall usage of Midazolam between sites were comparable (3.576mg vs. 3.512mg, p=0.413), however lower doses were observed for two consultants at site 2 (3.23mg vs 2.79mg, p=0.00 and 3.19mg vs 2.95mg, p=0.022). The use of analgesics showed no statistical differences between sites. Comfort score comparison showed no statistical differences overall, however comfort scoring was significantly better at site 2 for two consultants (p=0.03 and p=0.02)

**Conclusion:** Completion rates, use of sedation and comfort scores are comparable between the sites despite the difference in equipment. Therefore we conclude the quality of service provision is not diminished by the type of equipment utilised.

**0586: IS YOUR BLOOD ORDERING SCHEDULE FOR COLORECTAL RESECTIONS UP TO DATE AND COMPLIANT WITH NATIONAL GUIDELINES? AN AUDIT OF CROSS-MATCHED BLOOD UTILISATION IN ELECTIVE COLORECTAL RESECTIONS (ECR)**

Virginie Walker, Jane Hughes, Mandy Chadwick, Naomi MacKenzie. *Wrightington, Wigan & Leigh NHS Foundation Trust, Wigan, UK*

**Aims:** Assess compliancy of our blood ordering schedule against national guidelines by determining cross-matched blood usage in patients undergoing ECR.

**Methods:** Retrospective data collection for 12 consecutive months, on ECR (benign and malignant). Patients requiring preoperative blood transfusion excluded. Data analysed; operation, pre-operative radiotherapy, preoperative and postoperative haemoglobin, units cross-matched, blood transfusions.