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 centre.

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 TATTOOOING: IDENTIFICATION OF MODIFIABLE PRACTICES AT AN ENHANCED RECOVERY CANCER CENTRE

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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 Whips 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 68 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

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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 POLYPSIS RELATED DESMoids PRESENTING WITH AIR-FLUID LEVEL – A CLINICAL REVIEW AND MANAGEMENT ALGORITHM

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Aim: Familial adenomatous polyposis (FAP) related desmoid tumours (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 RECURRENT (LR) RATES AFTER OPERABLE RECTAL CANCER SURGERY

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Aims: LR rates following curative resection have been reported to be between 2.4 - 50% with LR rates hypothesised to be higher for abdominoperineal 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

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