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cancer risk was almost double for oesophago-gastric malignancy (risk ratio 1.85) and colorectal cancer risk had a 1.98% absolute risk reduction. Therefore normocytic anaemia should be investigated along similar lines to microcytic anaemia.

### 1409: THE EFFECT OF TRAINEE INVOLVEMENT IN COLORECTAL SURGERY: A SYSTEMATIC REVIEW AND META-ANALYSIS

Michael Kelly<sup>1</sup>, Aneel Bhangu<sup>2</sup>, Prashant Singh<sup>3</sup>, J.E.F. Fitzgerald<sup>2</sup>, Paris Tekkis<sup>2</sup>. <sup>1</sup> Imperial College London, London, UK; <sup>2</sup> Royal Marsden Hospital, London, UK; <sup>3</sup> University of Liverpool, Liverpool, UK.

**Aim:** The aim of this meta-analysis was to compare short term and oncological outcomes following colorectal resection performed by trainees compared to consultant surgeons.

**Methods:** Systematic literature searches identified studies published studies until December 2012. Studies considering colorectal resection for benign or malignant indications were included, and the primary endpoint was rate of anastomotic leak. Secondary endpoints were rate of wound infection, 30-day mortality, R0 resection, local recurrence and cancer survival. Odds ratios (OR) and hazard ratio (HR) were calculated for outcomes using meta-analytical techniques.

**Results:** The final analysis included ten comparative studies of 11423 colorectal resections, of which 7309 (64.0%) were performed by consultants, 3075 (26.9%) by supervised trainees and 751 (6.57%) by unsupervised trainees. The overall rate of anastomotic leak was 2.58%. Supervised trainees had a significantly lower leak rate compared with consultants (3.20% versus 1.10%; OR 2.72, p=0.05). Meta-analysis of survival following cancer resection (to a maximum of 5 years) revealed no significant difference between trainees and consultants for overall survival (HR 1.01, p=0.930) but a slightly improved cancer specific survival with trainees (HR 0.87, p<0.001).

**Conclusions:** Supervised trainees may perform colorectal resection with superior short term outcomes and equivalent oncological outcome to consultants.

## 1411: FROM CREATION TO CLOSURE: BEWARE THE DEFUNCTIONING LOOP ILEOSTOMY

James Kynaston, Sarah Linthwaite, Tim Cook, Michael Scott. Gloucester Royal Hospital, Gloucester, UK.

**Aim:** A defunctioning loop ileostomy is seen as a safe and simple procedure. We aimed to review the impact of a loop ileostomy on patients from its creation to closure.

**Method:** This was a single centre retrospective analysis of all patients undergoing defunctioning loop ileostomy between 2009 and 2012. Ileostomy related morbidity rates, readmission rates and length of hospital stay were collected on all patients.

**Results:** 162 patients were identified. Average age was 64 (range 18-93) and 36% were female (58/162). 4% (7/162) had stoma related morbidity before discharge, 19% (30/162) were readmitted with stoma related morbidity. 6% (10/162) had stoma-related morbidity as an outpatient. 6% (9/162) were readmitted with high output stoma and acute kidney injury. To date 112 patients have undergone closure. There was a 30% 30 day morbidity rate in those undergoing reversal.

**Conclusions:** This study has shown that a defunctioning loop ileostomy is associated with significant morbidity from creation to closure. Patients should be counselled accordingly during consent for this.

## 1431: RATIOS DERIVED FROM STANDARD HEMATOLOGIC INDICES PREDICT ONCOLOGIC OUTCOMES IN COLON CANCER

James East<sup>2</sup>, Mekki Medani<sup>1</sup>, Wendy MacKerricher<sup>2</sup>, John Hogan<sup>1</sup>, S. Polinkevych<sup>2</sup>, John Calvin Coffey<sup>3</sup>. <sup>1</sup> University Hospital Limerick, Limerick, Ireland; <sup>2</sup> Graduate Entry Medical School, University of Limerick, Limerick,

Ireland; <sup>3</sup> Center for Interventions in Infection, Inflammation and Immunity (4i), Graduate Entry Medical School, University of Limerick, Ireland, Limerick, Ireland. **Background:** The interaction between inflammation and cancer is well established. This study aims to determine if surrogate markers of systemic inflammation such as the neutrophil/lymphocyte ratio are associated with long-term oncological outcomes.

**Methods:** Hematologic white cell ratios were established for all patients undergoing colonic cancer resection (N=458). The optimal ratios associated with overall survival were established using a classification and

regression tree technique. The associations of these ratios with overall survival were further evaluated using Kaplan-Meier estimates, log rank analysis and a cox proportional hazards regression mode.

**Results:** Classification and regression tree analysis identified several white cell count ratios, which were associated with overall survival in an independent and statistically significant manner. The following ratios were associated with adverse overall survival: neutrophil/lymphocyte ratio greater than 7.2 (HR 2.1, P = 0.003), neutrophil/leukocyte ratio greater than 26 (HR 1.9, P = 0.005), neutrophil/white cell count ratio greater than 0.7 (HR 1.9, P = 0.005), white cell count/leukocyte ratio greater than 51 (HR 1.7, P < 0.001), white cell count lymphocyte ratio greater than 9.5 (HR 2.3, P = 0.002).

**Conclusions:** Multiple ratios derived from standard haematological indices are independent predictors of overall survival in patients undergoing resection for colon cancer.

#### 1481: A COMPARISON OF COSMETIC OUTCOMES FOLLOWING SINGLE-INCISION AND MULTI-PORT LAPAROSCOPIC COLECTOMY

Sathyan Balaji, Pritam Singh, Harry Corker, Paul Ziprin, Mikael Sodergren, Paraskevas Paraskeva. *Imperial College London, London, UK.* 

**Aim:** The aim of this study was to objectively compare cosmetic outcomes of single incision laparoscopic colectomy (SILC) with multiport laparoscopic colectomy (MLC).

**Methods:** All patients who had undergone SILC at St Marys Hospital, London between 2011 and 2012 were retrospectively matched with a similar cohort who had undergone MLC procedures using 4 criteria; age, sex, type of resection and tumour stage. Comparisons were made following completion of validated quality of life, body image and cosmesis questionnaires (SF-36, GIQLI, Body Image Questionnaire).

**Results:** 26 Patients were evaluated (SILC=18, MLC=8). All 8 quality of life dimensions of the SF-36 questionnaire were similar between groups. The Gastrointestinal Quality of Life Index scores also revealed no statistically significant differences (111.7 $\pm$ 5.8 vs 112.0 $\pm$ 5.4 p=0.30). The Body Image Questionnaire demonstrated that patients in the SILC group had significantly higher body image scores (19.4 $\pm$ 1.0 vs 17.6 $\pm$ 0.4 p=0.037). Cosmetic scores were also higher, however this was not statistically significant (21.6 $\pm$ 0.85 vs 19.3 $\pm$ 1.36 p=0.16).

**Conclusions:** In this small retrospective comparison of patient undergoing SILC and MLC, body image was significantly higher in SILC when compared to MLC while cosmetic scores demonstrated a trend towards being higher in SILC.

#### **ENDOCRINE SURGERY**

# 0072: RCSENG/ASIT POSTER PRESENTATION PRIZE WINNER: EFFECTIVENESS OF BARIATRIC SURGERY IN WOMEN WITH AND WITHOUT POLYCYSTIC OVARIAN SYNDROME

Sotonye Tolofari, Louise Hunter, Angelos Kyriacou, Akheel Syed. Salford Royal Foundation Trust, Manchester, UK.

**Introduction:** The prevalence of obesity in women with polycystic ovarian syndrome (PCOS) is 50%. Weight loss is effective at enhancing insulin sensitivity, reducing hyperandrogenaemia, hirsutism and restoring menstrual regularity and fertility. However, women with PCOS appear to be less responsive to weight loss interventions. The aim of this study was to compare weight loss outcomes of bariatric surgery in women with and without PCOS.

**Methods:** We performed a retrospective, comparative cohort analysis of weight loss, blood pressure (BP) and glycated haemoglobin (HbA1c) following gastric bypass/band surgery in women with and without PCOS aged 18-50 years matched ( $\pm 5$  years) and preoperative body mass index ( $\pm 5$  kg/m2). Total of 56 women, 28 with and 28 without PCOS.

**Results:** Mean preoperative age was 28.5 years, weight 137.5 kg, BMI 50.0 kg/m2, BP 135/85 mm Hg, and HbA1c 37 mmol/mol; there were no significant differences between the two groups. There was significant weight loss following bariatric surgery with no statistical difference between groups. Likewise, there was significant reduction in BMI, BP and HbA1c with no significant difference between groups.

**Conclusion:** Gastric bypass surgery in obese women with PCOS results in significant reductions in weight, BMI, BP and HbA1c, similar to women without PCOS.