

patients died within 365 days (44.4% 1 year mortality) with an average age at insertion of 81.8 years.

Conclusion The 30-day mortality rate in this study mirrors that found in previous published data, with all known deaths due to respiratory disease; none were found to be procedure related deaths. This is despite careful patient selection, assessment by a multi-disciplinary team and the application of other recommendations of the NCEPOD report. It would be prudent for further review and audit of careful selection of appropriateness for PEG particularly in cases with multiple comorbidities with consideration into the futility of the procedure. Thus patient selection for PEG insertion remains a difficult problem.

Abstract PMO-044 Table 1

ASA grade	Overall patients	30-Day mortality	1 Year mortality
I (normal healthy patient)	3 (6%)	1 (11%)	1 (5%)
II (mild systemic disease)	25 (56%)	5 (56%)	8 (40%)
III (severe systemic disease)	16 (36%)	3 (33%)	10 (50%)
IV (life threatening systemic disease)	1 (2%)	0 (0%)	1 (5%)
Total	45	9	20

Competing interests None declared.

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PMO-045 PERIOPERATIVE DIETETIC CONSULTATION LEADS TO IMPROVED NUTRITIONAL STATUS AT 2 WEEK FOLLOW-UP IN PATIENTS WITH OESOPHAGOGASTRIC CANCER

doi:10.1136/gutjnl-2012-302514b.45

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Introduction Patients with oesophagogastric cancer are at high risk of malnutrition.¹ The aim of this study was to assess the effect of advice provided by a dietitian peri-operatively on nutritional status at first surgical follow-up. The period studied was prior to specialist dietetic services being funded, resulting in lack of capacity to see all patients referred.

Methods Consecutive records (n=60) of patients who underwent oesophagogastric resection between August 2010 and November 2011 and referred to the dietetic service were reviewed. Jejunally (n=19) and parenterally fed (n=4), palliative (n=3), stromal tumour resection (n=1), peri-operative deaths (n=1) and incomplete records (n=1) were excluded. Anthropometrics were collected on admission and at first surgical outpatient follow-up. Number of consultations and time spent with a dietitian was recorded. Data for patients referred but not seen was compared to those who received dietetic input. Effect was measured as percentage weight loss. Tests for normality were performed. T-test was used to determine significance.

Results 31 patients were included in the study. All were initiated on oral nutrition post-operatively. n=21 received dietetic input and n=10 did not. Patient characteristics were similar between both groups apart from tumour differentiation (p=0.046), sex (p=0.023) and weight loss on admission (p=0.148). Mean length of stay=12.8 days (SE 1.1) and time to follow-up= 22.8 days (SE 2.2) (p=ns). Weight loss percentage at follow-up between patients seen and not seen by a dietitian was 7.87 (SE 0.70) and 11.66 (SE 1.24) respectively

(p=0.008). Adjusting for sex, tumour differentiation and weight loss on admission did not effect the result (6.88 (SE 0.93), 11.49 (SE 1.07) p=0.005). In the intervention group mean reviews by a dietitian=2.4 (SE 0.3) and time spent=138 min (SE 14). Regression analysis showed a tendency for attenuation of percentage weight loss on increasing time with a dietitian (r=0.33; p=0.142).

Conclusion Dietetic advice peri-operatively significantly attenuates weight loss at first outpatient follow-up. This effect may improve with increasing time spent with a dietitian. The data supports the Improving Outcomes Guidance on access to dietetic expertise. Although not found in this study, malnutrition is known to increase readmission and hospital stay.²

Competing interests None declared.

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PMO-046 AUDIT OF A NEW PATHWAY FOR ENTERAL FEEDING HEAD AND NECK RADIOTHERAPY PATIENTS

doi:10.1136/gutjnl-2012-302514b.46

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Introduction It is well recognised that Head and Neck Cancer (HNC) patients often “have problems with eating and drinking and a substantial proportion have to cope with tube feeding”.¹ With no national pathway, many units use gastrostomy tubes however, clinical indication and timing of placement are debated.² Due to gastrostomy tube complications, our unit routinely uses nasogastric tubes (NGT). Using data from a previous audit our centre developed a pathway for enteral feeding (EF) HNC radiotherapy (RT) patients.³ This pathway includes advice on enteral feeding in this patient group, specifically when and who to electively NG feed and guidance on selecting suitable patients for elective day-case NG placement. The pathway was launched in May 2011 and impact on length of stay (LOS) assessed.

Methods All patients with primary HNC treated with RT from 1st June to 30th September 2011 requiring EF were included in the audit. Details of anthropometry, day of RT NGT passed, LOS, number of NGT's required and nutrition related readmissions were collected.

Results 12 patients met the inclusion criteria; one was excluded from analysis as they were receiving long term gastrostomy feeding prior to RT. Details of the remaining 11 patients are detailed in Abstract PMO-046 table 1. Admissions >24 h occurred in two patients. One patient initially refused an NGT, subsequently needing admission for nutritional complications and an NGT. The second patient had laryngeal cancer, a diagnosis that doesn't normally require EF; therefore NG feeding was commenced due to unexpected late onset nutritional problems. Despite this using the pathway reduced the average LOS further to only 3 days.³

Abstract PMO-046 Table 1 (n=11)

Day-case	Overnight admission	>24 h admission	Refused NGT	Elective gastrostomy (pre-existing malnutrition)
3 (27%)	3 (27%)	2 (18%)	2 (18%)	1 (9%)

Conclusion Using our enteral feeding pathway and a multi-disciplinary approach, elective NGT feeding in HNC RT patients can be safely established using day-case facilities. It is a cost effective nutritional treatment with no significant complications identified. The pathway provides a clear, safe, efficient and effective approach to nutritional care in HNC RT patients.

Competing interests None declared.

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PMO-047 DIVERSION COLITIS TREATMENT WITH RAPIDLY FERMENTABLE FIBRE-SUPPOSITORIES

doi:10.1136/gutjnl-2012-302514b.47

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Introduction Diversion colitis, a nutritional deficiency disease of short chain fatty acids (SCFAs) in the defunctioned rectum, responds to butyrate enemas but these are impracticable due to unpleasant malodour. Treatment with rapidly fermentable fibre to SCFAs as suppositories, seemed a preferable option and was tested.

Methods "Hi-maize 260" which is naturally high in resistant starch and is optimally fermented to n-butyrate in the colon¹ was formulated into 2.0 g suppositories with a binding agent of cocoa butter. Patients were selected on symptoms (blood stained discharge, or anorectal discomfort) for treatment. Suppositories were used on alternative nights for 14 days. Colonoscopic examination of the rectum was performed before and 6 days after completion of treatment.

Results "Hi-maize 260" produces a concentration of 20.3 mmol of butyrate in the colon. The diverted rectum of three patients showed severe macroscopic proctitis and mucosal appearances returned to normal after 2 weeks treatment. Long term recovery was not assessed as two patients had the diversion reversed.

Conclusion Dietary fibre suppositories are a convenient treatment for diversion colitis. The healing capacity of fermentable fibre should enable distinction between diversion colitis and ulcerative colitis or Crohn's Disease in a diverted rectum where further reconnection or proctectomy might be contemplated.

Competing interests None declared.

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Obesity

PMO-048 REDUCTION IN PRO-INFLAMMATORY CYTOKINES AFTER WEIGHT LOSS SURGERY: A PROSPECTIVE STUDY

doi:10.1136/gutjnl-2012-302514b.48

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Introduction Morbid obesity is associated with a pro-inflammatory state, reflected by a relative increase in levels of pro-inflammatory

cytokines and corresponding decrease in anti-inflammatory cytokines. The production of active mediators by the adipose tissue plays an important role in this pathological state. We aimed to study the effects of laparoscopic sleeve gastrectomy (LSG) on markers of oxidative stress, inflammatory mediators interleukin (IL) 6 and IL-10, and the adipocytokines Resistin, Leptin and Adiponectin.

Methods We prospectively studied 19 patients (13 females, mean age 45 years; range 27–64) who underwent LSG at our institution. Fasting blood samples were taken pre-operatively and at 6 months post surgery. Fasting blood glucose, serum insulin and lipids were also measured at the same time points. IL-6, IL10, Adiponectin, Leptin and Resistin were measured using a bead-based multiplex bioassay. HOMA-IR was used as a measure of insulin resistance. Markers of oxidative stress—lipid peroxidation (TBARS) and glutathione peroxidase (GPX)—were measured using commercially available biochemical kits. Results are expressed as mean. Statistical analysis employed one-way ANOVA with repeated measures.

Results LSG was associated with significant weight loss (pre-op 60.0±2.59 kg/m², vs 53.0±2.35 at 6 weeks, 45.8±2.0 at 6 months, p<0.0001). Insulin resistance decreased significantly (HOMA-IR 8.7±1.4 vs 3.8±0.7 vs 2.4±0.5, p<0.0001). IL-6 and Leptin levels were significantly lower at 6 months post-op (6.6±1.0 pg/ml vs 4.8±1.1, p<0.031; 16.4±3.1 ng/ml vs 5.3±1.2, p<0.001). Resistin, Adiponectin and IL-10 levels did not change significantly: Resistin 1.0±0.1 ng/ml vs 0.97±0.1; Adiponectin 11.7±1.8 µg/ml vs 9.9±1.5; IL-10 pg/ml 0.72±0.1 vs 0.67±0.1. There were no significant changes in TBARS or GPX.

Conclusion Insulin resistance and BMI fall significantly after LSG and this is accompanied by a fall in pro-inflammatory cytokines, IL-6 and Leptin. There was no concomitant rise in anti-inflammatory IL-10 and adiponectin. Markers of oxidative stress did not change significantly. Restrictive surgery results in improvements in insulin resistance and a significant reduction in weight. The resulting reduction in adipose tissue, with changes in production of the adipocytokines, has a complex effect on the inflammatory milieu and requires further elucidation.

Competing interests None declared.

PMO-049 PRE-OPERATIVE WEIGHT LOSS IN PATIENTS UNDERGOING LAPAROSCOPIC GASTRIC BYPASS OR BAND

doi:10.1136/gutjnl-2012-302514b.49

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Introduction To evaluate the number of patients that achieved loss of at least 10% of their excess body weight prior to undergoing laparoscopic gastric bypass or gastric band surgery.

Methods Forty consecutive patients (mean age 48.28 (SD 10.52); 36 females) that underwent laparoscopic gastric bypass or gastric band surgery between May and November 2011 by one surgeon (EE) were included in the study. Patients were identified using the hospital's prospective bariatric database. Inclusion criteria included: age over 18, primary bariatric surgery, Body Mass Index (BMI) over 35. SPSS statistical software was used for the analysis.

Results Fifty-two patients were identified using the database, of which forty fulfilled the inclusion criteria. The mean BMI was 46.67 (SD 5.13) at presentation and 43.15 (SD 4.31) at surgery. Thirty-six patients lost weight pre-operatively, of which twenty-nine achieved their target weight loss. The overall mean % excess weight loss was 17.81% (SD 8.04); of those who achieved the target weight loss, the mean excess body weight loss was 20.27% (SD 6.90). The mean time interval between decision to operate and date of surgery was 28 weeks (SD 14.52). This was not shown to