

**PMO-053 APPETITE, TASTE AND SMELL CHANGES AFTER WEIGHT LOSS SURGERY**

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**Introduction** It is apparent from day-to-day practice that patients frequently report changes to their appetite, taste and smell after weight loss surgery. There has been surprisingly little written in the literature on this. The aim of the current study was to assess these parameters in a cohort of patients and to explore potential differences between the different types of procedure.

**Methods** Questionnaires relating to appetite, taste and smell were administered to 264 patients who had undergone weight loss surgery at our institution during the years 2000–2011. Eight of these patients also underwent detailed smell testing using a validated Olfactometer for taste testing for the flavours of sweet, salt, sour and bitter.

**Results** Responses were received from 133 patients (50%). Sensory changes in appetite, taste and smell were noted by 95%, 68% and 39% of patients respectively. Patients who had undergone Roux-en-Y gastric bypass (RYGB) more frequently experienced new aversions to specific foods compared to patients having other types of surgery (RYGB 73% vs sleeve gastrectomy 40% vs gastric banding 20%),  $p < 0.01$ . Patients who experienced food aversions experienced a greater level of postoperative weight loss and reduction in BMI, compared to their counterparts without these features. Detailed taste and smell testing did not identify significant changes to smell or taste thresholds after surgery, nor was there a significant correlation between overall taste and smell scores ( $p = 0.67$ ).

**Conclusion** This study provides preliminary support that patients do experience changes in their appetite, taste and smell following weight loss surgery. These changes need to be investigated further to help support patient education and the informed consent process.

**Competing interests** None declared.

**PMO-054 LAPAROSCOPIC SILASTIC RING LOOP GASTRIC BYPASS (SR-LGBP): A SINGLE CENTRE EXPERIENCE**

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**Introduction** Laparoscopic loop gastric bypass (LGBP) may represent a simpler alternative procedure to Roux-en-Y gastric bypass. Placement of a silastic ring (SR) may minimise weight regain. This study reports upto 5-year outcomes following laparoscopic SR-LGBP.

**Methods** Retrospective analysis of consecutive patients undergoing SR-LGBP between August 2005 and January 2008. A 15–20 ml lesser-curve gastric pouch was created with 32Fr orogastric bougie, handsewn gastroenterostomy 150–200 cm distal to the ligament of Treitz and a 6.5–7 cm silastic ring around the gastric pouch.

**Results** 156 patients (78% female, 22% male) with a mean (range) age of 44 (18–63) years, pre-op weight of 129 (83–197) kg and BMI of 46 (35–64) kg/m<sup>2</sup> underwent surgery. 87% had pre-operative comorbidities and median (range) follow-up was 35 (6–72) months. Mean (SD) % excess weight loss (EWL) at 6, 12, 24, 36 and 60 months was 74.6 (19.5), 93.4 (21.1), 98.8 (27.6), 93.5 (20.1) and 89 (16.1) respectively. 37% had complete resolution of comorbidities and 67.3% required vitamin/mineral supplementation. Overall 90 (57.7%) patients; 12 (7.7%) early and 78 (50%) late, reported minor complications, the commonest being reflux (10%) or vomiting/dysphagia/food intolerance (16%). 39 (25%) patients; 4 (2.6%) early and 35 (22.4%) late, reported major complications requiring hospi-

talisation. Marginal ulcer and anastomotic stenosis were seen in 7.7% and 9.6% respectively. 16 (10.3%) patients required reoperation: 6 (3.8%) bile reflux, 3 (1.9%) ring removal, 2 (1.3%) perforation and 5 (3.2%) other. There were no deaths.

**Conclusion** SR-LGBP achieves excellent EWL with low mortality. While vomiting, food intolerance, reflux, stricture and stomal ulceration were relatively common, only 10% required reoperation.

**Competing interests** None declared.

**PMO-055 QUALITY OF LIFE FOLLOWING LAPAROSCOPIC BANDED (SILASTIC RING) SLEEVE GASTRECTOMY**

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**Introduction** Placement of a silastic ring around a sleeve gastrectomy (SG) may minimise long-term dilatation and weight regain. This study assessed medium term quality of life outcomes.

**Methods** A questionnaire was sent to 46 patients that underwent surgery between November 2006 and February 2010. During the procedure the stomach was divided 3 cm proximal to the pylorus. Orogastic bougie diameter was 36 French (November 2006–June 2008) or 32 Fr (thereafter). A 6.5–7 cm diameter silastic ring was placed around the mid-portion of the SG.

**Results** Responses were received from 29 (63%) patients (25 female, 4 male) with a mean (range) age of 49 (33–65) years and mean pre-op BMI of 37.5 kg/m<sup>2</sup>. Mean (SD) weight loss and % excess weight loss at 3 years was 31.1 (10.8) kg and 90.6 (28.9)% respectively. 66% were satisfied with surgery (median Likert score=9) although 48% reported weight regain. Physical—97% reported food intolerances: meat (59%), solids (35%) and vegetables (17%). 21 (72%) patients reported vomiting: daily (14%), twice weekly (14%), weekly (29%) or less frequently (43%). 66% had reflux, with a median Visick of 2. Exercise capacity increased in 96% of patients. Emotional—28% described depression or anxiety affecting their work or other activities. Social—28% found physical health /emotional problems following surgery interfered with social activities. Compliance—59% had blood tests at least annually, 79% continued multivitamins and 41% required vitamin/mineral supplementation.

**Conclusion** Placement of a silastic ring around SG as a primary procedure should be avoided due to a high incidence of post-operative reflux, vomiting and food intolerance.

**Competing interests** None declared.

**PMO-056 LAPAROSCOPIC BANDED (SILASTIC RING) SLEEVE GASTRECTOMY: MEDIUM TERM OUTCOMES**

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**Introduction** Placement of a band of human dermis around the sleeve gastrectomy (SG) has previously been described to prevent late dilatation and weight regain. The aim of this study was to report our experience using a silastic ring placed around the SG.

**Methods** 53 patients (male 15%, female 85%) with a mean (range) age of 46 (23–65) years and mean (SD) preoperative BMI of 37.6 (5.3) kg/m<sup>2</sup> underwent surgery between November 2006 and February 2010. The stomach was divided 3cm proximal to the pylorus. Orogastic bougie diameter was 36 French (November 2006–June 2008) or 32 Fr (thereafter). A 6.5–7 cm diameter silastic ring was placed around the mid-portion of the SG. A retrospective analysis was performed.

**Results** All procedures were completed laparoscopically. Follow-up at 6 months, 1, 2 and 3 years was 96%, 92%, 87% and 47% respectively. Mean (SD) % excess weight loss at these time periods was 81.4 (25.6), 102.1 (27.3), 108.7 (38.2) and 97.5 (29.1) respectively. Mean (SD) weight loss at 2 years was 34.2(19.3) kg. 83% of patients demonstrated partial or complete resolution of their preoperative comorbidities including hypertension, diabetes, sleep apnoea and hyperlipidaemia. 17% developed new-onset reflux. 53% of patients required vitamin supplementation. Complications: Wound infection (1.8%), food bolus obstruction requiring endoscopy (3.8%) and silastic ring removal for food intolerance (7.5%). There were no deaths.

**Conclusion** While the banded (silastic ring) SG is a safe procedure with good medium term excess weight loss and comorbidity resolution, around 11% of patients required endoscopic or surgical reintervention within 3 years.

**Competing interests** None declared.

**PMO-057** **DIETARY INTERVENTION FOR INDIVIDUALS WITH SPINAL CORD INJURIES—A 2 YEAR REPORT ON THE SPINAL CLINIC FOR OBESE OUT-PATIENT PROJECT (SCOOP)**

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**Introduction** Obesity is common after spinal cord injuries (SCI)<sup>1</sup> and it is associated with chronic nutrition related complications. We previously reported that a simple dietetic-intervention can help SCI patients to lose weight without compromising lean body mass.<sup>2</sup>

**Methods** The present study aimed to assess the effectiveness of a dietitian led weight management clinic. Thirty-one individuals (52.4±11.5 years; body mass index (BMI): 32.9 kg/m<sup>2</sup>; 41% female) with SCI were referred for consultation to include nutritional advice and cognitive behaviour therapy in three consultations over 4 months. Outcomes measures included body composition from anthropometric measurements of BMI, mid upper-arm circumference (MUAC), triceps skinfold thickness (TSF) and mid-arm muscle circumference (MAMC), sitting blood pressure and dietary assessment of nutrient intake by 7-d food diary.

**Results** Of the thirty-one individuals, 15 (48.4%) reported one or more co-morbidities. Mean weight loss was 4.5 kg (SD 6.2) at week 16. Analysis of the pre- to post-intervention difference (using paired t-test) showed a significant reduction in weight (104.2 vs 100.4 kg, p=0.001), BMI (34 vs 33.1 kg/m<sup>2</sup>, p=0.004), total energy intake (6.84 vs 5.62 MJ/d, p=0.029), total fat (p=0.005), saturated fat (p=0.001) and alcohol (p=0.003). No significant changes were found in MUAC, TSF, MAMC and sitting blood pressure post intervention. We noted a significant reduction in MAMC at 1-year follow-up (30.2 vs 27.1 cm, p<0.001). The 7-d food diary showed an average energy intake of 7.65 MJ/d, which is 15% below the estimated requirement.

**Conclusion** The findings of this study suggest that current guidance overestimates nutritional requirements in the SCI population, and that simple dietetic-intervention could help overweight SCI patients to achieve weight loss, but that it may not be sufficient to stimulate/maintain muscle mass long term. Further research is warranted to test whether combining lifestyle and intensive physical therapy could reduce long-term muscle wasting.

**Competing interests** None declared.

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**Parenteral nutrition**

**PMO-058** **A SIMPLE AND AN EFFECTIVE STRATEGY FOR IMPROVING JUNIORS DOCTORS' KNOWLEDGE OF INTRAVENOUS FLUID THERAPY**

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**Introduction** Erroneous intravenous fluid therapy is a source of perioperative morbidity and mortality.<sup>1</sup> In most surgical units, junior doctors are given the major responsibility for prescribing intravenous fluids, even though their knowledge base is inadequate.<sup>2–4</sup> Training junior doctors in intravenous fluid therapy is required to improve their knowledge and reduce the harm caused by erroneous intravenous fluid therapy. In this study we evaluated whether a single focused teaching session, based on the current national guidelines for perioperative fluid therapy, could improve junior doctors' knowledge of intravenous fluid therapy.

**Methods** Junior doctors attended a focused teaching session on a perioperative fluid therapy. They completed the questionnaire at baseline, immediately after and again 2–5 weeks after the teaching session. The questionnaire was developed from the current national guidelines on perioperative intravenous fluid therapy; 2008 British Consensus Guidelines on Intravenous Fluid Therapy for Adult Surgical Patients.

**Results** The mean pre-education score was 4.3 (36%). The mean post-education scores immediately after and an average of 22 days after the teaching session were; 10.3 (85%) and 9.5 (79%) respectively.

**Conclusion** A single focused teaching session is a simple and an effective way of improving junior doctors' knowledge of intravenous fluid therapy. We recommend that a teaching session on intravenous fluids be integrated into the teaching programme of all junior doctors.

**Competing interests** None declared.

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**PMO-059** **PARENTERAL NUTRITION: AUDIT OF USAGE IN A DISTRICT GENERAL HOSPITAL WITHOUT A NUTRITION SUPPORT TEAM**

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**Introduction** Parenteral nutrition (PN) is well known to have possibility of serious sequelae, in particular from catheter related sepsis (CRS). Multiple studies have demonstrated that a Nutrition Support Team (NST), in particular a Nutrition Support Nurse (NSN), can reduce inappropriate PN as well as reducing CRS rates (Kennedy et al 2005). The aim of this audit was to document PN usage in a district general hospital without a NST or NSN.