

T5:PO.041

**Leptin and Acyl-ghrelin changes after bariatric surgery correlate to changes in feeding behaviour***Julian Emmanuel<sup>1</sup>, Mohamed Elkallay<sup>2</sup>, Majid Hashemi<sup>2</sup>, Marco Adamo<sup>2</sup>, Alberic Fiennes<sup>2</sup>, Rachel Batterham<sup>3</sup>*<sup>1</sup>Barts And The London NHS Trust- Metabolic unit<sup>2</sup>UCLH- 3- Bariatric surgery unit, University College London Hospital NHS Foundation Trust<sup>3</sup>Centre for Obesity Research, Department of Medicine, University College London

Cognitive factors of restraint and disinhibition are disordered in obesity. The three factor eating questionnaire (TFEQ) is designed to measure tendency to restrict food intake to control body weight (dietary restraint), and disinhibition of control of eating. TFEQ has been utilized as a psychometric instrument for the study of eating behaviours.

We conducted a prospective parallel group study in 17 patients with a BMI of  $45.9 \pm 1.1$  to examine changes in TFEQ scores, and plasma Leptin, acyl-ghrelin concentrations at 6 and 12 weeks following bariatric surgery.

There was a significant increase in cognitive restraint after bariatric surgery ( $p = 0.004$ ), significant increase at 6 ( $p < 0.05$ ) and 12 ( $p < 0.01$ ) weeks. Disinhibition was significantly ( $p < 0.0001$ ) decreased after bariatric surgery, significant decrease at 6 ( $p < 0.001$ ) and 12 ( $p < 0.001$ ) weeks. Cognitive restraint at 12 weeks after surgery did show a positive correlation ( $p = 0.081$ ,  $r = 0.19$ ) to excess weight loss. There was a negative correlation between excess weight loss and Disinhibition at 12 weeks ( $p = 0.037$ ,  $r = 0.26$ ). Plasma leptin did display negative correlation ( $p = 0.0015$ ,  $r = 0.19$ ) to cognitive restraint, and a positive correlation ( $p < 0.0001$ ,  $r = 0.36$ ) to disinhibition. Cognitive restraint does show positive correlation ( $p = 0.017$ ,  $r = 0.64$ ) with the decrease in meal stimulated acyl-ghrelin AUC at 12 weeks. The decrease in disinhibition does also show a negative correlation ( $p = 0.01$ ,  $r = 0.34$ ) with decrease in acyl-ghrelin AUC at 12 weeks.

The correlations between leptin/ acyl-ghrelin and cognitive restraint/ disinhibition are not able to answer the question of causality or consequence; however, endocrine changes may mediate some of the favourable feeding behaviour changes after surgery.

T5:PO.042

**Evolution of body mass index of women undergoing bariatric surgery in the pre- and pos-operative period – a retrospective study***Carvalho, D.P.<sup>1</sup>, Póinhos, R.<sup>1</sup>, Fernandes, A.<sup>2</sup>, Costa, J.<sup>2</sup>, Pereira, M.<sup>2</sup>, Correia, F.<sup>1,3</sup>*<sup>1</sup>Faculdade de Ciências da Nutrição e Alimentação da Universidade do Porto, Porto<sup>2</sup>Hospital de Braga<sup>3</sup>Faculdade de Ciências da Nutrição e Alimentação da Universidade do Porto, Porto Centro Hospitalar de São João, E.P.E.

**Introduction:** In recent years, there has been an increased interest in surgical treatment of morbid obesity in concomitance with the epidemic of obesity. The bariatric surgery has proven to be an effective treatment that helps the adherence to the eating plan, and, consequently, the ponderal loss.

**Methods:** This study consisted of analyzing data from 191 obese women, who were followed in the Nutrition consultant in the Service of Endocrinology, in the Hospital of Braga, and submitted to the adjustable gastric banding (AGB) and to the gastric sleeve (GS).

This information has been evaluated in clinical processes of participants in certain time points.

**Results:** In both methods, there was a gradual decrease of the BMI among the time of surgery and the 6th month after.

Patients submitted to adjustable gastric banding had best results of BMI between the moment of the surgery and 15 days after the surgery, while

women submitted to gastric sleeve had worse results of BMI between the 3 and 6 months after the surgery. Over half of the patients submitted to the adjustable gastric banding had grade I or grade II obesity after 12 months and most submitted to the gastric sleeve had pre-obesity or grade I obesity.

**Conclusion:** Differences were found between the 2 types of surgical methods. The grade I obesity was the final classification more predominant, at the end of the 12 months after, but the bariatric surgery allowed a higher decrease of the BMI with better results to gastric sleeve.

T5:PO.043

**Sleeve Gastrectomy: University Hospital Experience***Sousa, Preto*

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**Introduction:** Bariatric surgery is becoming an increasingly popular treatment in obese patients producing long-term and considerable changes in body weight. Nowadays laparoscopic sleeve gastrectomy (LSG) is considered to be a stand-alone bariatric procedure with increasing indication and major advantages. We present our experience with this technic, evaluating at three and six months the reduction of excessive body weight while reversing obesity related comorbidities such as, insulin-resistance, high blood pressure and hyperlipidemia.

**Methods:** We retrospectively analyzed the records of our first consecutive 119 patients. The aim was to analyze baseline demographics, comorbidities, operative outcomes, complications and weight loss.

**Results:** A total of 93 female and 26 male patients underwent LSG over the study period. There was no mortality. Intra-operative complications occurred in 2.4% of the patients. Mean body mass index (BMI) declined considerably from the initial  $44.8 \text{ kg/m}^2$  to  $37.8 \text{ kg/m}^2$ , and  $34.6 \text{ kg/m}^2$ , at three and six months. Mean percentage of excess weight loss (%EWL) gradually increased from 36.3% at three months to 51.3% at six months. At six months follow-up, studied comorbidities (hypertension, hyperlipidemia and insulin-resistance) as well as the number of prescribed medications were all significantly reduced.

**Conclusion:** Results from our series indicate LSG to be safe and efficient as a stand-alone bariatric procedure. At six months follow-up, sustained weight loss and reduction in the associated comorbidities were detected. Whether these good results will be maintained will require prolonged follow-up with special attention to unwanted regained weight.

T5:PO.044

**Laparoscopic sleeve gastrectomy for morbid obesity: Our preliminary results***Gokhan Selcuk Ozbalci, Kagan Karabulut, Ayfer Kamali Polat, Serdar Senol, Hamza Cinar, Kenan Erzurumlu*

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**Introduction:** Laparoscopic sleeve gastrectomy (LSG) became a favorite option for morbid obesity treatment in last years. The aim of this study is to present our initial experience about this bariatric technique.

**Methods:** Seventy-five obese patients (57 females and 18 males) underwent LSG between September 2012 and December 2013. Of those, forty-three patients who completed minimum 6 months postoperative follow up, were evaluated for preliminary results. The safety and short-term efficacy of LSG were examined. Data collected were age, weight, body mass index(BMI), operative time, postoperative complications, length of hospital stay and degree of weight reduction.

**Results:** For the first 43 patients, mean age was 41.75 years (range 23–57) and mean preoperative weight and BMI were 139.2 kg (range 98–214) and  $51.4 \text{ kg/m}^2$  (range 40–79.8), respectively. There was one mortality occurred due to pulmonary embolism. Mean operative time was 1.5 hours (range 1–3). Median hospital stay was 6.5 days (range 4–12). Average excess weight loss (EWL) and BMI were 48.6% and  $37.9 \text{ kg/m}^2$  at 6 months and 61.7% and  $34.3 \text{ kg/m}^2$  at 1 year respectively.