

body mass index of 44.6 kg/m²). Two BP measurements were recorded preoperatively and then postoperatively at 1, 2, 4, and 6 month. At each visits, patients were instructed to collect 24-hour urine and food diary for calculate daily sodium intake.

Results: The reduction in systolic BP is observed at month 1, 4, and 6 (mean ± SEM, 7.2 ± 3.4, 10.1 ± 3.5, and 9.9 ± 3.8, *P* < 0.05). Diastolic BP decreased at 2-, 4-, 6-month post the surgery (mean ± SEM, 6.2 ± 2.6, 8.8 ± 2.7, 8.4 ± 3.2, *P* < 0.05). The clinical significant reduction of both systolic and diastolic BP is evident at 4 and 6 months. Twenty four hour urine volume and urinary sodium excretion persistently decrease up to 6 months. Oral sodium intake decreases only at 1 and 2 months after the surgeries, then returns to baseline. Glomerular filtration rates decrease significantly at 4 and 6 months after Roux-en-Y gastric bypass.

Conclusion: Reduction of both systolic and diastolic BP appears to correlate with weight reduction and decreased GFR post gastric bypass surgeries.

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Life beyond bariatric surgery: men and women's experience in the long-term

Natvik E

Department of Surgery, Central Hospital, Førde, Norway

Introduction: The present qualitative study aimed to explore patients' experiences and enhance a deeper understanding of the impact of change following bariatric surgery.

Methods: In-depth interviews were carried out with eight men and women, who had the Duodenal Switch procedure 5–7 years ago. The method of analysis was a combination of qualitative phenomenological analysis by Giorgi and Systematic Text Condensation by Malterud. Merleau-Ponty's phenomenological perspective of perception was used to understand the participants' experience.

Results: The patients described their experience in terms of one overarching theme; Perceived health and function in daily life, and two broad themes; The lived body and bodily functions – the tension between keeping control and feeling secure; Being active, participating in the community – between coping and demands. The patients related extensive weight-loss to emancipation, self-expression and connecting with others. Several medical co-morbidities were regarded as in remission, and daily function very improved. Bothersome side-effects and persistent musculoskeletal pain were considered less important by the patients. Living with profound change was enriching as well as demanding, and there was a considerable variation of how the participants negotiated changes and adapted to new ways of living. They described how psychosocial aspects and stress challenged to which extent they could cope with bodily changes, new eating habits, physical activity and weight-maintenance over time. Additional follow-up programs focusing on the individual patient and her/his specific needs should be taken into consideration when patients are guided and followed up.

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Ergem: effects of roux-en-y gastric bypass surgery on energy metabolism

Schmidt JB¹, Gregersen NT¹, Pedersen S¹, Hansen DL², Worm D², Madsbad S², Astrup A¹ and Sjödin A¹

¹*Department of Human Nutrition, Faculty of Life Sciences, University of Copenhagen, Copenhagen, Denmark;*

²*Department of Endocrinology, Faculty of Health Sciences, University of Copenhagen, Hvidovre University Hospital, Hvidovre, Denmark*

Introduction: Studies have suggested that energy expenditure (EE) may be relatively increased or preserved after Roux-en-Y gastric bypass (RYGB) surgery. This may be related to alterations in levels

of gastrointestinal (GI) hormones, bile acids (BA), and/or body composition that may occur following RYGB. GI hormone alterations may also affect appetite sensation (and taste preferences) reported after this treatment.

Objective: To assess the short and long term effects of RYGB on energy expenditure, body composition, and appetite sensation, and how this relates to GI hormone alterations.

Methods: A total of 48 obese non-diabetic patients (BMI ≥ 40 kg/m²) will be recruited from a waiting list of patients selected for RYGB. The study includes a baseline visit (week 0), followed by three visits where 24 hour EE is estimated by indirect calorimetry using a respiration chamber (week 7, 11 and 104). Participants are instructed to follow a low calorie diet (Cambridge Weight Plan, 1000 kcal/day) from week 0–12, and are randomized to undergo RYGB surgery at either week 8 or 12, thereby providing a 'pair-fed' control group. Anthropometric measurements and body composition (using DXA) will be assessed at each visit, and blood samples for analyses of GI hormones (GLP-1, PYY, oxyntomodulin) and BA will be collected. In addition, the response of GI hormones and appetite sensation (using visual analogue scales) to a meal challenge conducted inside the chambers will be evaluated.

Results: The study is ongoing and will be finished by the end of 2011. Interim results will be presented at the conference.

Conflict of interest: None disclosed.

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Changes in the production of inflammatory and angiogenic factors by adipose tissue explants during the course of bariatric surgery-induced weight loss

Dalmas E¹, Poitou C^{1,2}, Aron-Wisnewsky J^{1,2}, Bouillot J-L³, Clement K^{1,2} and Guerre-Millo M¹

¹*INSERM U872 Nutrimique, P and M Curie-PARIS6*

University, Centre de Recherche des Cordeliers, Paris, France;

²*Assistance Publique-Hôpitaux de Paris, Nutrition and Endocrinology Department, Pitié-Salpêtrière Hospital, Paris, France;* ³*Assistance Publique-Hôpitaux de Paris, Surgery Department, Cochin Hospital, Paris, France*

Introduction: Obesity is characterized by a low-grade inflammation, partially reversible with weight reduction. The contribution of adipose tissue (AT) secretion in obesity and during the course of weight loss is not fully established.

Methods: We used Luminex-based proteomics to measure the secretion rate of 27 factors in 24-hour media of AT explants obtained in 23 obese patients (BMI: 48.8 ± 1.7 kg/m²) before and 3, 6 and 12 months after bariatric surgery. Macrophage content was determined by immunocytochemistry with a CD68 antibody in subjects' AT the same time points.

Results: An early drop of leptin release (–70%) was observed at month 3 while adiponectin remained unchanged during the whole period. Secretion of several pro-inflammatory factors (TNF α , IL12, IL6, MCP-1, RANTES) increased until month 6 and decreased thereafter. Similar kinetic profiles were observed for anti-inflammatory cytokines (IL10, IL13 and IL1-Ra). The rate of secretion of major angiogenic factors (bFGF, PDGF-BB and VEGF) increased regularly reaching five-fold the pre-surgical values at month 12. AT macrophage number was stable, while the abundance of crown-like structures regularly decreased with weight reduction.

Conclusion: Weight loss induces a biphasic profile of secretion in AT, common to inflammation related factors, regardless of their pro- or anti-inflammatory activity. This was accompanied by up-regulation of pro-angiogenesis factors. Given their steady number, a phenotypic switch in AT macrophages, which remained to be defined, is