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different food groups and macronutrients 1 year after sleeve gastrectomy (SG) and gastric bypass (GB).

Methods: The Oseberg study is a triple-blinded, randomized controlled trial primarily aiming to compare remission of type 2 diabetes after SG and GB. Dietary data were collected using a food frequency questionnaire (FFQ) at baseline and 1 year after surgery. Dietary intake was calculated with a nutrient analysis program (KBS) based on the Norwegian food composition table.

Results: A total of 94 out of 109 patients, 47 in each group, completed the FFQ at both baseline and 1 year. At baseline the groups had similar age, weight, BMI and percentage women; mean (SD) 48.1 (9.5) years, 125.9 (22.8) kg and 42.4 (5.3) kg/m² and 61%, respectively. At 1 year, the intakes of energy, protein, fat, carbohydrates and sugar declined similarly in both groups with 42%, 36%, 44%, 43% and 52%, respectively. The fiber intake after SG at 1 year was both lower; mean (SD) 20 g (5) vs. 24 g (8), $p=0.003$, and more reduced; mean between-group difference in change -5 g (95% CI: -8 to -1), compared with GB. There was a reduced intake of most food groups at 1 year, but the intake of fruits/berries (-33%), fish (-47%) and milk/yoghurt (-32%) declined after SG only. The intake of low-fat cheese (375%) and yoghurt (118%) increased after GB, which was not demonstrated after SG. The between-group differences in changes were significant for low-fat cheese, yoghurt, fish and fruits/berries; mean (95% CI) -12 g (-24 to -1), -50 g (-98 to -2), -24 g (-42 to -5) and -68 g (-114 to -21), respectively.

Conclusion: The intake of fruits/berries, fish and fiber declined more 1 year after SG compared with GB. Thus, the dietary pattern after SG was less beneficial with regard to cardiometabolic risk.

Disclosure of Interest: None declared

PD-035

IMPACT OF OBESITY OVER BONE METABOLISM BIOMARKERS AND FRACTURE RISK IN POSTMENOPAUSAL WOMEN

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Rationale: The role of obesity on the bone metabolism and the risk of fracture is controversial. Bone mass might increase in parallel with the body weight. Moreover, the pro-inflammatory status of obesity could have deleterious effects. The aim of this study was to compare bone metabolism biomarkers in post-menopausal women with and without obesity. As secondary endpoint, we evaluated the risk of fracture in both groups.

Methods: We designed a prospective cohort study including postmenopausal women with and without obesity (BMI ≥ 30 Kg/m²), followed for 5 years. We evaluated clinical and biochemical variables. The first group included age, body mass index (BMI), frequency and type of fractures. Serum levels of calcium levels, PTH, serum procollagen 1 amino-terminal propeptide (P1NP), crosslap, alkaline phosphatase (AP), 25-hydroxyvitamin D (25-OH-VD) were determined.

Results: We included 250 postmenopausal women, aged 56.2 (3.91) years, 50.4% of them obese, with a mean BMI of 39.5 (5.13) Kg/m². The comparison between biochemical variables between obese and non-obese group showed calcium levels of 9.5 (9.27-9.70) vs. 9.47 (9.27-9.67) ($p=0.36$) mg/dl; PTH of 53.2 (38,44-65,96) vs. 35.2 (25,36-42,40), ($p<0.01$) pg/ml; P1NP of 45.5 (34,39-55,16) vs. 56.7 (45,34-70,74), ($p<0.01$) ng/ml; crosslap 0.34 (0,14) vs. 0.33 (0,14), ($p=0.49$) ng/ml; AP 78.5 (21,22) vs. 86.4 (22,51), ($p<0.01$) U/l; 25-OH-VD 17.3 (7,85) vs. 24.5 (9,60) ($p<0.01$) ng/ml. The frequency of fractures after 5-years follow up was 9.2% in the obese group and 9.8% in the non-obese group, without statistical differences ($p=0.93$).

Conclusion: Women with obesity had lower values of P1NP and 25-OH-VD and higher values of PTH than non-obese females. Moreover, these biochemical differences had no influence on fracture rates.

Disclosure of Interest: None declared

Critical care / Nutritional assessment / Nutrition and chronic disease

PD-037

IMPACT OF COVID-19 INFECTION IN PATIENTS WITH CHRONIC INTESTINAL FAILURE. A NATIONAL EXPERIENCE

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Rationale: Patients with chronic intestinal failure (CIF) have a high probability of long-term survival on HPN. In the general population, patients with COVID-19 can experience digestive symptoms. Taking into account CIF patients characteristics, we hypothesized that a COVID-19 infection can determine delayed diagnosis and care, more severe complications, and atypical clinical presentations in CIF population. The objective of this study was to establish the clinical presentation of COVID 19 infection in CIF patients and their outcome.

Methods: A prospective and retrospective national multicenter study, including all CIF patients (HPN > 3 months) with confirmed diagnosis of COVID-19 infection (by lung CTscan or PCR) were included. All approved HPN centre for adults and children participated.

Results: The Inclusion period was from the 01/02/ 2020 to 05/05/2020. Among approximately 1000 CIF adult patients and 500 children, 9 (7F/2M) adult patients with a median BMI of 20.8 (± 3)kg/m² were diagnosed with Covid-19 infection, none in pediatric population. The median age was 56 (± 23)years. The cause of CIF was short bowel syndrome (7/9) and motility disorder (2/9) with a 5.9 (± 6) years of HPN duration. COVID 19 was confirmed by the association of positive COVID-19 PCR and CTscan in 6 cases, a positive PCR performed in a private laboratory in 2 cases and typical pulmonary lesions on CT-scan despite a negative PCR in one case. Clinical symptoms firstly described were fever (5/9), anosmia (2/9), headache (2/9), dyspnea (5/9) and digestive symptoms (4/9). Six patients were hospitalized, and 2 of them required intensive care. Two patients presented severe complications; one hyperosmolar hyperglycemic state in a patient without previous diabetes diagnosis and one death probably due to a massive pulmonary embolism 1 month after COVID-19 infection in a context of pulmonary arterial hypertension.

Conclusion: In the context of COVID pandemia, the prevalence of COVID 19 diagnosis in CIF adult population seems to be around 9/1000. Currently, no case was diagnosed in pediatric CIF patients. Since the initial presentation could be unusual in patients without known risk factors, expert centers should be alerted. As the infectious disease continues to spread around the world, a worldwide international would be necessary to deepen those data.

Disclosure of Interest: None declared

PD-038

EXCESSIVE NITROGEN UPTAKE BY THE LIVER LIMITS THE ANABOLIC RESPONSE TO ENTERAL AMINO ACIDS INTERVENTION DURING EARLY SEPSIS-RECOVERY

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Rationale: Optimal feeding in patients recovering from sepsis is critical to preserve muscle mass. An essential amino acid (EAA) mixture restores protein anabolism in the early sepsis-recovery phase in the pig. Unclear are the effects on organ level. Therefore, organ nitrogen balances (NB) during an iso-nitrogen nutritional intervention with a balanced free amino acid (TAA) or EAA mixture are determined.

Methods: In catheterized pigs (± 25 kg), acute sepsis was present for 6 hours (*Pseudomonas aeruginosa*: 3e8 CFU/ml/h IV). At t=6h, recovery was started by a single dose of gentamycin (5mg/kg) and intra-gastric