Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Conclusion: GLIM detects more patients with MN than ESPEN. Since LC is the predominant group in our cohort, low BMI and reduced FFMI alone are unreliable for MN diagnosis due to edema/ascites. Hence, weight loss may play a major role in the mechanisms leading to MN diagnosis in chronic GI diseases.
Disclosure of Interest: None declared

PD-047

ENTERAL NUTRITION DOSE-DEPENDENTLY INHIBITS GASTRIC MOTILITY VIA A FEEDBACK LOOP THAT CAN BE ASSESSED WITH A NOVEL GASTRIC MONITORING SYSTEM

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Rationale: In critically ill patients it is difficult to determine the appropriate enteral nutrition (EN) infusion speed, balancing the risk of malnutrition versus intolerance. A neurohumoral feedback loop matches gastric emptying (GE) rate to the intestine's processing capacity by altering gastric motility. We developed a technique for continuous measurement of gastric motility (VIPUN™ Gastric Monitoring System (GMS), KU Leuven, Belgium). The GMS comprises a double-lumen 12 French nasogastric balloon catheter. One lumen for enteral access, the second lumen connects the intragastric balloon to a control unit with a pressure sensor. Pressure fluctuations reflect phasic gastric motility. We aimed to demonstrate that gastric motility, as measured with the GMS, can serve as an indicator for the feedback loop. This feature is essential for the development of the GMS as tool to guide enteral nutrition.
Methods: This was a randomized three-way crossover study in healthy adults. The balloon catheter was positioned after an overnight fast and was inflated with 150 mL air. Fasted motility was recorded for 2 h, then EN (1 kcal/mL) was infused for 2 h, at 25, 75 or 250 mL/h. Recording continued for 4 h. A Short-Term Gastric Balloon Motility Index (STGBMI) ranging from 0 (no motility) to 1 (maximal gastric contractility) was calculated. Gastric Content Volume (GCV) was quantified with magnetic resonance imaging at nine time points. GE was assessed with a ^{13}C breath test and expressed as gastric half-emptying time (GET½). Data are presented as mean(SD).
Results: 19 subjects were enrolled, 12 completed the procedures and 10 datasets were available for full analysis (age: 32(14) years, BMI: 24(2) kg/m^2, 4 men). Fasted STGBMI was similar in all conditions. Motility decreased during EN infusion at 250 mL/h (Δ = -0.46(0.15), $p < 0.001$) and at 75 mL/h (Δ = -0.23(0.14), $p = 0.007$), not at 25 mL/h (Δ = 0.03(0.26)). Motility during and after infusion was inversely correlated with GET½ (Spearman's ρ = -0.39 and -0.53, $p = 0.03$ and 0.003, respectively). Postprandial motility was correlated with GCV at the end of infusion (ρ = -0.81, $p < 0.001$).
Conclusion: With increasing EN infusion speed, gastric motility and emptying rate decreased. The novel GMS can be used to study the activation of this feedback loop. The GMS has the potential to become a bedside guide to optimize EN administration in critically ill patients.
Disclosure of Interest: N. Goelen Shareholder of: VIPUN Medical, G. Doperé: None declared, J. Morales: None declared, S. Van Huffel: None declared, V. Vandecaveye: None declared, J. Tack Consultant for: Scientific advice to AlfaWassermann, Allergan, Christian Hansen, Danone, Janssen, Nutricia, Shire, Takeda, Theravance, Tramedico, Truvion, Tsumura, Zealand and Zeria pharmaceuticals, Speakers Bureau of: Abbott, Allergan, SHire, Takeda, Truvion and Zeria, P. Janssen: None declared

Nutrition and chronic disease / Obesity and the metabolic syndrome

PD-049

NUTRITIONAL TREATMENT IN CRITICALLY ILL PATIENTS WITH COVID-19 DISEASE: SPANISH EXPERIENCE IN A UNIVERSITY HOSPITAL

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Rationale: Patients with COVID-19 disease develop respiratory insufficiency, 5% of which needs ICU treatment. Describe the experience of a tertiary hospital in the nutrition treatment, during this pandemic and the adherence to clinical guidelines.
Methods: Retrospective study including COVID-19 patients from 3 ICU units of our hospital that needed medical nutrition treatment (MNT). Collected variables: sex, age, BMI, underlying diseases, time from hospitalisation to ICU admission, type of respiratory support, caloric and protein requirements (25 kcal/kg adjusted body weight(ABW), 1.3 g/kg ABW/day), MNT type (enteral nutrition (EN), parenteral nutrition (PN), mixed EN+PN), total calories (including propofol) and proteins administered, percentage of caloric and protein goal in ICU day 4th and 7th, metabolic complications, acute kidney failure (AKF), mortality. Variables are expressed as percentage and mean±SD. Statistics: IBM-SPSS26v.
Results: Forty-nine patients were included (78% men), 63.1±11.8 years, BMI 29.1±5.1 kg/m^2. Comorbidities: 53% overweight, 28.5% obesity, 61.2% hypertension, 49% dyslipidaemia, 20.4% diabetes. 98% required mechanical ventilation (98% pronation). Hospitalisation to ICU admission time: 3.2±3.4 days. 71% EN, 98% PN, 69% mixed EN+PN. Caloric and protein requirements: 1747±201 kcal and 91.7±10 g. Table 1 presents total and % of caloric and protein goal at day 4th and 7th. 59.2% and 10.2% patients had low levels of P and Mg in the first week, 81.6% hyperglycaemia, 8.2% hypoglycaemia, 95% hypertriglyceridemia (23%>500 mg/dl), 34.7% AKF and 16.3% KRT, 49% mortality.

Table 1.	Calories (kcal) % caloric goal	Protein (g) % protein goal	% patients >70% caloric goal	% patients >70% protein goal
ICU:4th day	1520±471 88.3±28.7	74.4±23.4 82.4±28.2	83%	72.3%
ICU:7th day	1609±450 93.1±26.8	81.9±24.1 90±27.4	89.9%	89.9%

Conclusion: Most of our patients reached estimated caloric and protein target at day 4th and 7th of ICU. PN was necessary in most of our sample in the first week to reach nutritional requirements. We observed a high rate of metabolic complications which requires close monitoring of nutritional treatment.
Disclosure of Interest: C. Cuerda: None declared, C. Velasco: None declared, M. Miguélez: None declared, R. Romero: None declared, P. Carrasco: None declared, C. Serrano: None declared, I. Bretón: None declared, M. Motilla: None declared, L. Arhip Grant / Research Support from: Fresenius-Kabi, Á. Morales: None declared, M. L. Carrascal: None declared, S. Rubio: None declared, C. Calvo: None declared, M. Camblor: None declared

PD-050

TOTAL LYMPHOCYTE COUNT IS A PREDICTOR OF CHRONIC OPPORTUNISTIC LUNG DISEASE (COLD) IN SEVERLY MALNOURISHED ANOREXIA NERVOSA (AN) PATIENTS

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Rationale: Severe malnutrition induces immune deficiency. Only few cases of COLD have been reported in AN. The aim of this study was to identify factors associated with COLD in a population of malnourished AN.
Methods: Observational study in a tertiary unit dedicated to extremely malnourished AN patients. COLD diagnosis was done according to suggestive