intra-abdominal sepsis despite both undergoing surgical closure. Octreotide treatment produced an average daily fistula output of 228 ml, compared to 498 ml with placebo (p=0.014).

Conclusions: One paper, examining Octreotide, fulfilled the inclusion criteria; no meta-analysis could be completed. Octreotide appeared to reduce fistula output compared to placebo. Further RCTs comparing Somatostatin analogues with placebo are required for further guidance.

References:

1. Carlson, G.L. and P. Dark, *Acute intestinal failure.* Curr Opin Crit Care, 2010. 16(4): p. 347-52.
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Disclosure of interest: None declared.

SUN-P373
SIMULATION AS A TRAINING TOOL FOR ARTIFICIAL NUTRITION

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Rationale: Artificial (enteral and parenteral) nutrition is a complex medication widely prescribed and administered by relatively junior medical staff and may result in significant morbidity and mortality (1). This study was undertaken in order to assess the efficacy of a simulation-based curriculum in artificial nutrition.

Methods: In 2016, 37 health care professionals (mainly registered dietitians − RD, 2 MD's and 4 registered nurses − RN) participated in 3 high fidelity simulation sessions in the setting of a University Simulation Center in the Strasbourg University Hospital (France). The educational

Number of participants		37
General satisfaction rate	(full)agreement	97%
Scientific evaluation	(full)agreement	97%
Knowledge update	(full)agreement	92%
Change in practice	(full)agreement	76%

team was led by 2 intensive care physicians , 2 intensive care nurses and a pharmacologist. The setting was a high fidelity simulation center with a patient ward and a consultation office equipped with cameras, and a debriefing room with screen. The scenarios were performed by play-acting, role play and hands on demonstrations. Facilitation and debriefing were performed by the supervisory training staff. Satisfaction and impact were evaluated.

Results:
The overall satisfaction rate was high, however the main result was a tangible impact («so called return on investment») since 12 reports have since been filed by RD's concerning overenthusiastic refeeding and cases of hypophosphatemia during parenteral nutrition, thus avoiding potential morbidity and mortality.

Conclusions: This study confirms the usefulness of simulation as an educational tool in the field of enteral and parenteral nutrition. It underpins the major role RD's may play in artificial and especially parenteral nutrition supervision.

References:

(1) Parenteral Nutrition Electrolyte Abnormalities and Associated Factors Before and After Nutrition Support Team Initiation. Braun K et al, JPEN 2018;42(2):387−392.

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SUN-P374
MUSCLE QUALITY IS ASSOCIATED WITH POSTOPERATIVE OUTCOMES IN CARDIAC SURGERY PATIENTS

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Rationale: Validity of handgrip strength as outcome predictor has been widely investigated in cancer patients and in several clinical settings. The prognostic ability of handgrip strength in cardiac surgery patients has been poorly explored to date. The aim of our study was to examine the relationship between muscle quality (as strength generated per unit of muscle mass) and different postoperative outcomes in patients undergoing cardiac surgery.

Methods: Participants were enrolled among subjects admitted at the Cardiac Surgery Unit, "Umberto I" Hospital, Sapienza University, Rome, Italy, for either valve replacement or coronary artery bypass grafting. Patients aged between 18 and 85 years were included. Body composition was assessed by bioimpedance analysis (BIA_ACC, Biotekna, Venice, Italy). Phase angle (50 kHz) was considered. The handgrip strength test (HGST) was performed. Handgrip strength was normalized to fat-free mass (FFM) in order to obtain an indicator of muscle quality. The nutritional screening tool "MUST" was used. The length of stay (LOS), length of stay in the intensive care unit (LOS-ICU), and the length of cardiac rehabilitation were considered as postoperative outcomes, and hyperglycemia as perioperative outcome.

Results: 35 participants were included (age: 66.7 ± 9.6 years, BMI: 27.1 ± 4.9 kg/m^2). Based on the MUST, only 3% of study participants were at medium nutritional risk, whereas the majority of patients (97%) were at low risk. An inverse relationship emerged between muscle quality and LOS (r=-0.41, p=0.04), and between muscle quality and the length of cardiac rehabilitation (r=-0.48, p=0.03). Phase angle was negatively correlated with perioperative hyperglycemia (-0.56, p=0.04).

Conclusions: Muscle quality exhibited significant associations with relevant postoperative outcomes. Handgrip strength should be included as preoperative evaluation in the cardiac surgery setting.

Disclosure of interest: None declared.

SUN-P375
PREOPERATIVE NUTRITIONAL STATUS OF COLORECTAL CANCER PATIENTS IS RELATED WITH SURGICAL OUTCOMES

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Rationale: Malnutrition has a negative impact on surgical outcomes. Patients with colorectal cancer are considered at low nutritional risk. The aim of our study was to evaluate the nutritional status of colorectal cancer patients planned for elective surgery, the prevalence of malnutrition and their post-operative development.

Methods: A prospective observational study was carried out from June-December 2017. Patients were assessed prior to colorectal cancer surgery. Anthropometric measures (Body Mass Index and weight loss), laboratory parameters (albumin, prealbumin and transferrin) and nutritional scales (Subjective Global Assessment) were evaluated. Surgical complications, measured with Clavien-Dindo classification, were compared with the preoperative nutritional status. Patients received nutritional support, according to their needs.

Results: 69 patients were included, 65% male. Mean age 64.9 ± 10.18 years. At evaluation the mean BMI was 28.45 ± 5.2. 20.3% had lost more than 10% body weight and 10.1% lost 5−10% body weight. Mean albumin, prealbumin and transferrin levels were 4.33 (± 0.48), 22.95 (± 6.17) and 274 (±