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.

Rationale: Eicosapentaenoic acid (EPA) supplementation has been proposed to be associated with muscle mass improvement in solid tumors. We aim to assess the effect of EPA supplementation on muscle mass during a radiotherapy-based treatment in patients (pts) with LA-SCCHN.
Methods: A single center randomized double-blind, placebo-controlled clinical trial was conducted from December 2015 to September 2018 in pts with LA-SCCHN undergoing a conservative treatment with chemo-radiotherapy or bioradiotherapy. Patients were randomly assigned to receive oral pure EPA at a dose of 2.4g or placebo from diagnosis until 2 months after oncological treatment with 2 years follow-up. We assessed body composition by CT imaging at L3 level, nutritional and inflammatory biomarkers throughout the oncological treatment. We measured EPA compliance according to red blood cell EPA levels. All pts were evaluated by an oncology dietitian and nutritional support was given following standard guidelines. To study the changes throughout the treatment, a mixed linear model of repeated measures was used.
Results: We included 54 pts, 27 pts per group. Sixteen (59.3%) pts were malnourished at the experimental group (EG) and nine (33.3%) at the control group (CG) (p=0.056) at diagnosis. No significant differences at baseline in body composition or other nutritional and inflammatory biomarkers were observed. Over the 6 months treatment period, both intention-to-treat analysis and per protocol analysis revealed no statistically significant improvements in body composition, nutritional or inflammatory biomarkers were observed. The rate of drops out were high for both groups (n=11, 40.7% in EG; n=10, 37% in CG). Compliance showed to be low along the oncological treatment in both arms; only 10 out of 18 (55.6%) patients achieved at least 2 g of blood cell EPA levels in the EG at 10 weeks and 9 out of 18 (50%) at the end of oncological treatment p=0.892).
Conclusion: EPA supplementation has no effect on muscle mass in patients with LA-SCCHN treated with radiotherapy. These Results may be affected by the differences in nutritional status at baseline and low compliance.
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ASSOCIATION BETWEEN INFLAMMATORY MARKER WITH CHEMOTHERAPY TOXICITY AFTER THE FIRST CYCLE OF CHEMOTHERAPY IN BREAST CANCER

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Rationale: Toxicity due to chemotherapy will delay the chemotherapy schedule and survival in cancer patients. Cancer patients are affected by inflammation from the tumor itself and some with sarcopenia before started the chemotherapy. The aim of the study is to evaluate the increment of inflammatory markers after one cycle of chemotherapy in breast cancer patients.
Methods: A prospective cohort study was conducted in a cancer referral hospital at Banten, Indonesia. The study population was women with breast cancer. Toxicity was defined by Hematology & gastrointestinal toxicity using CTCAE v4.0. CRP, as an inflammatory marker, was evaluated before the first and after three cycles of chemotherapy. Several factors related to chemotoxicity were assessed. The analysis was done with chi-square and logistic regression analysis.
Results: A total of 110 out of 128 patients were followed-up completely after their first chemotherapy cycle either with Taxane or Anthracycline-based regimen. The median age of the participants was 47(25-29) years old. Toxicities were found in 21 (19%) patients, and after their first cycle, 10 (47.6%) participants had increased CRP. Eary stage [OR(CI) 4.34 (1.35-13.94), p <0.001], CRP [OR(CI) 80.00 (9.32-686.14), <0.001]. Comorbidity, type of chemotherapy, and ECOG performance status were not correlated with toxicities.
CRP is associated with toxicities even after adjusted with BMI and cancer staging [OR(CI) 71.523 (7.937-644.533), <0.001]
Conclusion: There was an association between inflammatory marker with chemotherapy toxicity after 1 cycle of chemotherapy in breast cancer patients.
Disclosure of Interest: None declared.

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NUTRITIONAL STATUS AND BODY COMPOSITION IN COVID-19 ONCOLOGICAL INPATIENTS

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Rationale: Body composition analysis in COVID-19 cancer patients (pts) is limited. Our aim is to describe nutritional status and body composition in COVID-19 oncological inpatients.
Methods: We collected demographical and clinical data from oncological COVID-19 pts referred to the clinical nutrition unit (CNU) from March-December 2020. In those who also had PET/CT scan available at the time, body composition was analysed at L3 level. Sarcopenia was established according to previously published cut-points.
Results: From 89 COVID-19 oncological inpatients, 37pts (41.5%) were referred to CNU. Twenty-five (67.6%) were men, aged 68 years (SD 10.75). The most frequent tumor location was lung (n=9 24.3%). Mean body mass index was 24.67kg/m^2 (SD 5.49) with 27% overweight (n=10) and 16.2% obese (n=6). Mean weight loss in the last 3 months was 7.73% (SD 8.31), 35 pts (94.6%) were malnourished and needed nutritional support. 27 pts (72.9%) received oral nutrition supplementation, 5 pts (13.5%) enteral nutrition, 4 pts (10.8%) parenteral nutrition and 1 patient (2.7%) nutritional counseling due to dysphagia. Mean blood serum parameters at nutritional assessment were albumin 30.41g/dL (SD 4.94) and protein C-reactive 132.33 mg/L (SD 97.54). Thirteen pts (14.6%) had also images for body composition analysis. Sarcopenia was present in 8pts (61.5%) and 4 of them were also overweight (30.8%). Mean skeletal muscle index was 42.86 cm^2/m^2 (SD 9.97) and total adipose tissue was 111.61 cm^2/m^2 (SD 52.6). Mean length of hospital stay was 22 days (SD 14.51). Sarcopenia was associated with an increase in length of stay (p=0.031). No statistical differences were found by gender, tumor localization or survival.
Conclusion: Malnutrition and sarcopenia are frequent in COVID-19 oncological inpatients. In our cohort, sarcopenia is associated with hospital length of stay in these patients.
Disclosure of Interest: None declared.

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MACHINE LEARNING ALGORITHMS TO PREDICT WEIGHT GAIN AT DISCHARGE IN NEONATAL INTENSIVE CARE UNIT: STATE OF THE ART

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Rationale: Hospitalized newborns are at increased risk of malnutrition and especially preterm infants often experience extrauterine growth