



THE USE OF PARENTAL NUTRITION IN A PEDIATRIC ONCOHEMATOLOGY UNIT

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Parental-Nutrition (PN) is often used to support children with cancer. With this work we investigate how many children with cancer received PN from January-2020 to December-2021. We also calculate if hematological-patients had longer median PN's episodes than those nonhematological and if there were differences on kcal/kg introduced by PN between the two groups.

Starting from the Oncohematology-Unit PN's prescriptions from January-2020 to December-2021, we created a database where we collected patient's name, age and BMI at the beginning of PN, cancer diagnoses, comorbidities, number of PN's prescriptions, type (Total-Parental-Nutrition (TPN) or Partial-Parental-Nutrition (PPN)), number of PN's cycles, days for each cycle, kcal/kg introduced by PN.

In this period the Oncohematology-Unit prescribed 311 PNs-169 in 2020, 142 in 2021- to 18 patients (8 females, 10 males) with cancer. They had between 2-26 years (mean=10 years), 12 had BMI<16 and 5 had specific comorbidities (paralytic-ileus, typhoid, kidney-insufficiency, sepsis, hepatic-transplant). 9 had hematological diagnoses (Acute-Myeloid-Leukemia(3), Acute-Lymphoid-Leukemia(5), Burkitt-Lymphoma(1)): they received 222 PNs (115 TPN, 107 PPN) divided into 22 cycles (mean of PN's days/cycle=10 (min.2, max.25)). 9 had diagnoses of solid cancer (Ewing-Sarcoma(2), Cerebral-Tumor(6), Rare-Hepatic-Tumor(1)): they received 89 PNs (34 TPN, 55 PPN) divided into 12 cycles (mean of PN's days/cycle=10 (min.3, max.12)). Nonhematological-patients received more PN's kcal/kg than those hematological (mean= 28 vs 20 kcal/kg).

During these years PN was prescribed to 18 patients with cancer and those hematological had longer median episodes of PN with a lower intake of kcal/kg than those nonhematological because of more frequent mucositis and sepsis induced by longer chemotherapy's neutropenia in hematological patients.

