4CPS-149 CENTRAL VENOUS CATHETER-RELATED BLOODSTREAM INFECTIONS IN PATIENTS ON TOTAL PARENTERAL NUTRITION

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Background and Importance Current evidence shows that the central line-associated bloodstream infections (CLABSI) frequency is between 15–30% and there are related risk factors, such as the insertion line and its duration. CLABSI is associated with high mortality and economic costs increased.
Aim and Objectives Analysing the CLABSI frequency and characteristics in patients on total parenteral nutrition (TPN) and to compare with the current data.
Material and Methods Retrospective observational study, carried out since January to April 2023 in a regional university hospital. Selected patients: all adult patients on under the care of Intensive Care Unit (ICU) and General Surgery (GS). Collected data: demographic data (sex, age),TNP duration, central venous catheter (CVC)-related data (insertion place, insertion line) and patients CLABSI diagnosed, days until the infection development and microbiological culture. Search sources: medical histories database, electronic prescription and nutrition program (CLINUS).
Results 64 patients were enrolled, 70% men, average age 60 years (SD±16). 67.19% were surgical patients and 32.81% were ICU patients. The average TPN duration was 14.7days (SD±11.43). CVC insertion places: 64% operating room and 36% ICU. The most frequent line insertion was the jugular vein (68.75%). There was 15% CLABSI diagnosed patients. The average number of days until bacteremia development was 25.4 days (SD±18.41). The most isolated microorganism was S.epidermidis (60%).
Conclusion and Relevance The CLABSI frequency in our hospital coincides with the current data. Although the subclavian vein is the most recommended because of its lower risk of infection, the jugular line has been the most frequently used in this hospital. None of the CVC were inserted on the hospital ward, which reduces the risk of infection. However, we do not have data on the lines nursing care and this is another risk factor that should be considered. The results show that CLABSI is still a common complication in patients on TPN and it is needed to increase the healthcare efforts to reduce its frequency.

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Conflict of Interest No conflict of interest.

4CPS-150 PHARMACEUTICAL INTERVENTIONS IN OBESE PATIENTS IN HAEMATOPOIETIC STEM CELL TRANSPLANTATION

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Background and Importance Although obesity is a risk factor of inferior health, it has not been conclusively proven to be associated with worse outcomes in haematopoietic stem cell transplantation (HSCT). Despite the insufficient scientific evidence, the American Society for Blood and Marrow Transplantation (ASBMT) consider that some drugs used in conditioning therapy before HSCT may need dose adjustment in obese patients in order to reduce toxicities, such as gastrointestinal and haematologic toxicities.
Aim and Objectives The objective of this study is to assess pharmaceutical interventions of dose drug adjustment in obese patients during hospital admission following the ASBMT recommendations.
Material and Methods Prospective observational study of obese patients receiving HSCT from January 2021 to August 2023. Drugs that required weight dose adjustment were busulfan, etoposide, cyclophosphamide, thiotepa and carmustine. Patients were categorised by body mass index (BMI): normal (<25kg/m2), overweight (25–29.9kg/m2), obese (30–39.9kg/m2) or severely obese (BMI>40kg/m2). Dose adjustment was made when real weight >120% of ideal weight and BMI ≥27kg/m2. Pharmaceutical interventions were carried out for a correct drug dosage.
Results 154 adult patients received HSCT in the study period (87 autologous, 67 allogeneic) for haematological diseases. In 77 (50%) patients had been prescribed a chemotherapy drug that required weight dose adjustment, 31.2% (24/77) patients were overweight or obese, so they needed a prescription, pharmaceutical review. Median BMI of these patients were 31 kg/m2 (28–32). Out of these 24 obese patients, 17 (70.8%) medical prescriptions were reviewed and 23 drug doses were modified after pharmaceutical intervention to get an appropriate dose in obese (10 busulfan, 6 thiotepa, 5 carmustine, 2 cyclophosphamide).
Conclusion and Relevance Selecting the optimal dose of conditioning chemotherapy in obese patients is complicated, but the role of the pharmacist is essential to optimise chemotherapy in obese patients receiving HSCT, working with the haematologist in a multidisciplinary team. Further research is necessary to corroborate whether these dose adjustments provide real benefit in reducing toxicity.

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