

sarcoma is chemosensitive, 80% of patients relaps after chemotherapy and some receive further treatments like High-dose chemotherapy (HDC) with autologous stem cell transplantation (ASCT). According to 2011-Transplant Review Guidelines, minimum patient evaluation requirements for ASCT are echocardiogram with LVEF >40% and pulmonary function testing (PFT) with FVC \geq 50%, FEV1 \geq 50% and DLCO 40% for adults.

Case report: The patient was a 23-year-old man who had been suffering from non-productive cough since January 2011. Radiologic examinations revealed a mass of 13×15 cm in the left lower lung zone and presence of pleural involvement. The patient underwent biopsy and histopathologic diagnosis revealed a Ewing's sarcoma. Combination VAC- alternating IE chemotherapy for 5 cycles, 31 fractions of radiotherapy and following two cycles of VAC/IE chemotherapy were administered. PET-CT after therapy showed intense metabolic activity highly suspicious for residual disease and left pneumonectomy with partial pericardiectomy was performed in February 2012. Pathologic diagnosis revealed a high-risk Ewing sarcoma. Patient was candidate for HDCT with ASCT. LVEF was 55%. PFT results were within normal limits (FVC: 45%, FEV1: 50%, DLCO: 52%). High-dose ICE (ifosfamide 10g/m², carboplatin 1 g/m², and etoposide 1g/m²) was administered. The 3.2×10⁶ CD34+ cells/kg were harvested and reinfused. *Candida albicans* isolated from hemocultures and caspofungin treatment was given in follow-up periods. No other complication was recorded and engraftment was obtained 17 days after reinfusion. Patient is still in remission and under follow-up.

Conclusion: Ewing's sarcoma is a chemosensitive tumor. With supporting therapy and close follow-up, HDCT with ASCT is a strongly recommended combination therapy in high-risk Ewing's sarcoma even for patients with borderline organ functions, especially in physically young patients.

PP-078

ENGRAFTMENT KINETICS IN HDC AND STEM-CELL TRANSPLANTATION PATIENTS

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Objective: To evaluate engraftment kinetics and supportive treatments correlated with the number of stem cells reinfused in cancer patients receiving high dose chemotherapy (HDC) stem-cell transplantation (SCT).

Material and methods: The medical records of cancer patients who had undergone stem cell collection beginning on the 5th day of G-CSF administration was reviewed. Patients who received HDC and SCT were divided into three groups based on the number of CD34+ stem cells collected (1–2×10⁶/kg, group A; 2–5×10⁶/kg, group B; \geq 5×10⁶/kg, group C). HDC agents (BEAM, ICE, Melphalan and Total Body Irradiation and Cyclophosphamide (TBI-C)), engraftment time (defined as total leukocyte count more than 1000/mm³), antibiotics and antifungal therapy, number of transfusions (erythrocyte and trombocyte suspension) and G-CSF support were analyzed.

Results: One hundred and seven patients were included in the study (24.3% female and 75.7% male). Three group numbers were Group A (n=24), Group B (n=63), Group C (n=20). Patients' diagnosis were Non-Hodgkins Lymphoma (34.5%), Hodgkins Lymphoma (21.4%), Multiple Myeloma (15%), Testicular cancer (9.3%) and Ewing sarcoma (7.4%). There was no statistically difference between the three groups in regard to the engraftment times. Although the duration of antibiotics and antifungal drugs, the number of transfused erythrocyte suspension and the duration of G-CSF therapy in group A were relatively higher than other groups, this difference was not statistically significant (p>0.05). In regard to the number of transfused erythrocyte suspension, the only statistically difference was found between group A and group B (p<0.05).

Discussion: Infusion of \geq 2×10⁶/kg of CD34+ cells in HDC patients is a necessary for hematopoietic recovery. But the CD34+ infused cell range of 1–2×10⁶/kg is also acceptable in HDC and SCT.

PP-079

THE EFFECT OF ANEMIA AND RED CELL TRANSFUSIONS ON MORTALITY IN YOUNG AND ELDERLY INTENSIVE CARE PATIENTS WITH NOSOCOMIAL INFECTION

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Objective: Nosocomial infections (NI) are infections that occur after hospitalization, not present in incubation period initially. Anemia is a problem that can occur with a variety of factors in intensive care units and it may be an important cause of morbidity and mortality. In this study, the effect of anemia and red blood cell transfusion on mortality is compared between geriatric and non-geriatric patients with NI that known to be an important factor for mortality.

Methods: This study is planned at tertiary adult intensive care unit with nine-bed. 112 patients, who developed hospital-acquired infection, participated in the study. NI diagnosis was determined according to international definitions. According to WHO criteria, older than 65 years of age were classified as geriatric patients.

Results: Fifty-seven of the patients were female and 55 were male. 27 patients were under the age of 65 and 85 patients were 65 years or older. Anemia was present in 62 patients (13 under the age of 65, and 49 overage 65) and 28 of them (22 and over the age of 65, 6 under the age of 65) were needed red blood cell transfusions. In non-geriatric group, mortality was not associated with or without anemia. Also transfusions were not associated with mortality in this age group. In geriatric group, presence of anemia increased the mortality rate substantially. But transfusion requirement was not associated with mortality rate in this age group.

Conclusion: In literature, the effect of anemia and red blood cell transfusion on mortality rate in intensive care patients was found be controversial. Previously, geriatric and non-geriatric patients with NI have not been evaluated according to association between mortality rate and anemia and red blood cell transfusion.

According to our study, treatment of anemia with transfusion therapy in elderly patients is likely to be useful.

PP-080

A CASE OF NEUTROPENIA DUE TO ACUTE EXPOSURE WITH ALUMINUM PHOSPHIDE

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Introduction: Aluminum phosphide (AIP) is a highly toxic insecticide. AIP has been banned in some countries due to high toxicity and causing to death. Previously various complications, some of them may be fatal, have been reported as a result of AIP toxicity. AIP induced leukopenia has been reported previously but AIP induced isolated neutropenia was not observed in literature. Here in we present a severe neutropenia case due to vocational AIP toxicity.

Case: A 37-year-old male patient was admitted to hematology clinic with complaints of fatigue, abdominal pain, diarrhea and high fever. He denied any chronic diseases and medications. It was learned that four days ago he has been exposed to occupational AIP in the form of incense. Also he reported a second exposure to AIP one month ago with similar complaints. However; he did not come to the hospital. In laboratory findings showed Hb: 13.8 g/dl, WBC: 3.8×10⁹/L, Neu: 0.4×10⁹/L, Lym: 2.7×10⁹/L, PLT: 248×10⁹/L. The patient was hospitalized and antibiotics were started in febrile neutropenia protocol without G-CSF. On the 4th day of admission, neutrophil values increased to 2.2×10⁹/L spontaneously. Viral parameters, brucella, biochemical and hormonal tests were normal. The lack of other findings explaining the neutropenia and rapidly increment of neutrophil counts suggested that the patient had acute AIP toxicity.

Discussion: AIP toxicity, mostly acute poisoning cases is seen. In the light of the available data neutropenia is not an expected laboratory finding of AIP toxicity. In fact leukocyte count is expected to be higher and in a study high leukocyte count has been reported to be associated with poor prognosis. Detailed medical history and profession should be questioned carefully in patients presenting with neutropenia.