focus only on proportion of committed myeloid HSC: optimal HSC content to be transplanted should be in a certain balance.

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PP 40

HEMATOLOGICAL FINDINGS IN COVID-19 AND INSIGHTS TO STEM CELL THERAPY

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Objective: As the COVID-19 was spreading to all countries, its manifestations were identifying gradually, which were related to several organs. COVID-19 is associated with distinct hematological changes, increased serum inflammatory markers, and coagulopathy. **Methodology:** Most of the known COVID 19 complications are related to the patients' prognosis and mortality, particularly in those with severe disease, the issue which attract the scientists and the medical physicians all over the world to find the proper treatment for such monter, we discussed the associations between COVID-19 clinical features and complications, and secondly, its hematological findings and coagulopathy are investigated. **Conclusions:** Such associations not only may shed light on our prognostic view of patients with COVID-19 but also will entail significant therapeutic implications. One of its key implications is to utilize the mesenchymal stem cells (MSCs) to treat patients with COVID-19. Herein, this kind of novel therapy has been discussed, as well with its cons and pros points

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PP 41

OUTCOMES OF ALLOGENEIC SC TRANSPLANT IN HEMATOLOGICAL MALIGNANCY PATIENTS USING BUSULFAN 3 (9.6 MG/KG) BASED CONDITIONING REGIMEN

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Objective: To study the outcomes of allo-HCT in patients with hematological malignancy who received BU3 (9.6 mg/kg) based conditioning from matched related or unrelated donors. **Methodology:** A retrospective analysis of KFSHRC-BMT Database, we identified 65 patients who received Allo-HCT between October 2005 and December 2019 at King Faisal Specialist Hospital & Research Center. The patients received SCT from full HLA matched related or unrelated donors. We excluded Mismatched MUD, Cord & Haplo-identical Stem Cell sources. **Results:** We identified 47 AML (72.3%), 8 MDS (12.3%), 8 Myelofibrosis (12.3%) & 2 CML (3.1%) patients. Acute GvHD grade II-IV and III-IV occurred in 29% and 14% respectively. Chronic GvHD occurred in 55% and was extensive in 24% of patients. With Median follow-up 60.5 months, 2 years and 5 years OS were 58.5 % and 44.1% respectively. The 2 years and 5 years DFS were 52.9% and 44.5% respectively. Cumulative incidence of relapse and NRM at 2- years were 29.5% and 17.4% respectively. Day +100 TRM were 10.7% **Conclusion:** Allogeneic SCT using BU3 based regimen appears feasible to use in patients who are not suitable for fully myeloablative (BU4) regimen. TRM, DFS & OS rate were comparable to reports from studies using BU4 based regimen, warranting prospective studies in these patients.

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PP 42

A CASE OF REFRACTORY IMMUNE THROMBOCYTOPENIA APPLIED WITH AUTOLOGOUS HEMATOPOETIC STEM CELL TRANSPLANTATION

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Case report: A 61-year-old male patient who had previously been splenectomized for immune thrombocytopenia, hospitalized with mucosal bleeding. Upon failure to respond to steroid, intravenous immunoglobulin, rituximab, danazol, azathioprine and eltrombopag treatment, autologous hematopoietic stem cell transplantation was performed to the patient. At the end of the first month, he had normal platelet count.

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PP 43

INVESTIGATION OF DRUG-DRUG INTERACTIONS INVOLVING ANTI-INFECTIVE DRUGS IN PATIENTS UNDERWENT HEMATOPOIETIC STEM CELL TRANSPLANTATION

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Objective: Drug-drug interactions are an important cause of adverse drug events. The preventable or manageable nature of drug-drug interactions puts them at the center of interventions. Since hematopoietic stem cell transplantation is a challenging and multi-drug process, drug-drug interactions are frequently encountered. **Methodology:** In our study, the drugs used by a total of 100 patients with 50 autologous and 50

allogeneic bone marrow transplants for 10 days before transplantation, on the day of transplantation and for 10 days after transplantation were examined retrospectively in terms of interaction. Two paid softwares and two free softwares were used to examine interactions. The obtained data were analyzed with Microsoft Excel program. **Results:** A total of 3805 interactions were observed in the 21-day period in 50 patients who underwent allogeneic stem cell transplantation, and these interactions occurred with the repetition of 1017 interactions in different patients. For the same period in 50 autologous stem cell transplant patients, 2906 interactions were detected, and this number occurred with 725 different interactions seen in different patients. It has been understood that anti-infectives cause serious interaction load. **Conclusion:** Hematopoietic stem cell transplantation is a period in which prophylactic or anti-infective treatment for the detected microorganism is applied intensively. Interactions of anti-infectives with each other and with other drugs in the treatment regimen are frequently encountered during the transport process. Interactions should be identified and their clinical significance should be demonstrated. It should be handled with the partnership of physician-clinical pharmacist.

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PP 44

EVALUATION OF COMMON INTERACTIONS INCLUDING ANTI-INFECTIVE DRUGS IN PATIENTS UNDERWENT AUTOLOGOUS AND ALLOGENEIC STEM CELL TRANSPLANTATION

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Objective: Hematopoietic stem cell transplantation is a challenging process involving polypharmacy. Drug-drug interactions are common due to the large number of drugs used in patients, and antiinfectives are frequently involved in interactions due to their widespread use. **Methodology:** In our study, the drugs used by a total of 100 patients with 50 autologous and 50 allogeneic bone marrow transplants for 10 days before transplantation, on the day of transplantation and for 10 days after transplantation were examined retrospectively in terms of interaction. Two paid softwares and two free softwares were used to examine interactions. The obtained data were analyzed with Microsoft Excel program. **Results:** 1017 different interactions were detected in patients with allogeneic bone marrow transplantation and 725 different interactions in patients with autologous bone marrow transplantation. It was observed that 342 interactions were common in the two transplant types. Interactions involving anti-infectives have been studied and the data showed antifungals, antibacterials and antivirals cause significant interaction load. Some interactions were found to be dependent on the transplant process. **Conclusion:** Allogeneic bone marrow transplantation and autologous bone marrow transplantation are challenging processes in which intensive drug therapy is applied. Knowing the interactions that are common to both types of transplantation and the interactions involving anti-infectives specific to a certain period of the transplantation process allows the process to be managed effectively. It is important to manage interactions in physician-clinical pharmacist collaboration

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TRANSFUSION MEDICINE AND APHERESIS

PP 45

THERAPEUTIC PLASMA EXCHANGE IN PATIENTS WITH NEUROLOGICAL DISEASES: A 9-YEAR, SINGLE-CENTER EXPERIENCE

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Objective: Therapeutic plasma exchange (TPE), is based on the removal of pathogenic substrates from plasma with replacement fluid. TPE is being used in the treatment of many neurological diseases, especially Myasthenia Gravis (MG) and Guillain Barre Syndrome (GBS). The aim of this study is to analyse the efficay and safety of TPE experience in neurological disorders. **Methodology:** We reviewed the medical records of all 59 patients who received a total of 267 therapeutic cycles between 2012 and 2021 in our tertiary care university hospital. Respond assesment was evaluated with Medical Research Council (MRC) scoring system. Neutrophil count, lymphocyte count and neutrophil/lymphocyte ratio was recorded before any treatment and 7 days after the last plasmapheresis cycle. **Results:** Of the 59 patients, 30 (50.8%) were male and 29 (49.2%) were female. Of these patients 44.1% were diagnosed with MG, 27.3% with GBS, %8.5 with Multiple Sclerosis (MS). The median number of TPE sessions per patient was 5 [1-7]. 33.9 % of patients had at least one complication that hypotension was the most seen (%22). Overall response rate was %76.3. MRC score was significantly higher in the group with response than the group without symptom regression (p <0.05). **Conclusion:** TPE is a safe and an effective treatment option in neurological diseases. TPE related side effects/complications were generally mild to moderate and manageable. Performing the TPE response evaluation with the MRC scoring system was beneficial for the reliability of the efficacy as a concrete finding.

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