

## POSTER SESSION I

## AUTOIMMUNE

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**Donor Derived Systemic Lupus Erythematosus (SLE) after Allogeneic Transplantation**

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Donor-related autoimmune diseases after hematopoietic cell transplantation (HCT) are not well characterized. Most post-transplant immune disorders come in the guise of GVHD or reactions by the recipient to therapy (pneumonitis). The extreme minority are due to donor-related adoptive immunity. It is interesting that donor-derived auto-immune issues are not more common after HCT, suggesting the presence of identifiable risk factors.

A 30-year-old male underwent myeloablative matched related allogeneic peripheral blood stem cell transplant for Philadelphia chromosome positive Acute Lymphoid Leukemia (ALL). Importantly, the patient did not have any history of rheumatologic disorders, and specifically no history of Systemic Lupus Erythematosus (SLE). On D+10 he developed chest pain; echocardiogram showed a moderate pericardial effusion that resolved with NSAIDs therapy. He later (D+73) developed myalgia and poly-synovitis requiring significant doses of opioids for relief. Infectious work-up was negative. Autoimmune evaluation demonstrated anti-nuclear antibodies (ANA) with elevated anti-double stranded DNA (477 U (range 0–29U)) as well as anti-smooth muscle antibody (SM Ab – 77 U (0-19.9)). SLE diagnosis was made by Rheumatology and the patient was started on hydroxy-chloroquine, celecoxib and prednisone. The patient responded and is currently on maintenance therapy. In retrospect, donor history was notable for chronic pain and labs showed a mild eosinophilia with an absolute eosinophil count of 530/ $\mu$ l. Significantly, the donor was subsequently tested and diagnosed with SLE as well.

Donor screening for auto-immune diseases could be considered in those with suspicious findings on evaluation. This case demonstrates a real threat to recipient morbidity after HCT due to a donor-related immune issue. Further study is needed to understand the incidence, severity and pattern of autoimmune diseases after HCT.

## AUTOLOGOUS TRANSPLANTS

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**Refractory or Relapsed Hodgkin's Lymphoma Treated with High Dose Chemotherapy Followed By Autologous Stem Cell Transplantation: Experience at Skmch Lahore**

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**Purpose:** To review the outcomes of refractory and relapsed Hodgkin's Lymphoma in pediatric patients treated with high dose chemotherapy (HDC) followed by autologous stem cell transplantation (ASCT) at a single center.

**Materials and Methods:** All patients, up to the age of 18 years, with refractory or relapsed Hodgkin's Lymphoma who had complete or good-partial response to salvage chemotherapy were included in the study. All received HDC and ASCT during October 2010 to June 2014. Medical records of these patients were reviewed. The following variables were collected in addition to demographics and stage of disease at the time of relapse.

Time to engraftment from the day of stem cells re-infusion

Radiological response assessed by PET-CT at day-60 after stem cell re-infusion and

Disease free interval till the last follow-up

**Results:** Nineteen patients were studied, 15 were male. Median age at relapse was 13 years (range 4-18 years). At the time of relapse, 10 patients had stage IV disease, 6 had stage III and two of stage II and one of Stage I. Median time to engraftment was 13 days (range 10-21 days). Complete metabolic remission was demonstrated in all 19 cases on FDG PET/CT scan on day-60. Two patients had significant morphological residual disease requiring involved field radiation therapy. All but one patient remained disease free for the duration of follow-up (median 16 months, range 3- >44 months). Disease free survival (DFS) was 92% during this follow-up period. One patient had disease progression at 7 months post ASCT.

**Conclusion:** HDC(BEAM) followed by ASCT appears an effective treatment strategy for relapsed or refractory pediatric Hodgkin's Lymphoma who had complete or good-partial response to salvage chemotherapy, in our single center experience during our short term follow-up. Long term follow-up is suggested to evaluate disease free and overall survival benefits.

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**Single Center Experience with High Dose Melphalan and Two Day Washout in Patients with Multiple Myeloma on Hemodialysis Undergoing Autologous Stem Cell Transplant**

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**Background:** High-dose melphalan followed by autologous stem cell rescue has been shown to significantly increase progression free survival and overall survival in patients with multiple myeloma. Renal failure (RF) often precludes patient enrollment in studies involving high-dose melphalan conditioning for autologous stem cell transplant (ASCT) due to increased treatment-related morbidity and mortality. However, several studies have shown that RF should not be an exclusion criterion and early ASCT could be helpful in