
A Real-World data of 100 Day outcomes of Multiple Myeloma patients undergoing Autologous Stem Cell Transplant using Non-Cryopreserved Stem Cells

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AIMS:

To evaluate the day 100 outcomes of ASCT using non-cryopreserved stem cells in MM patients.

METHODS:

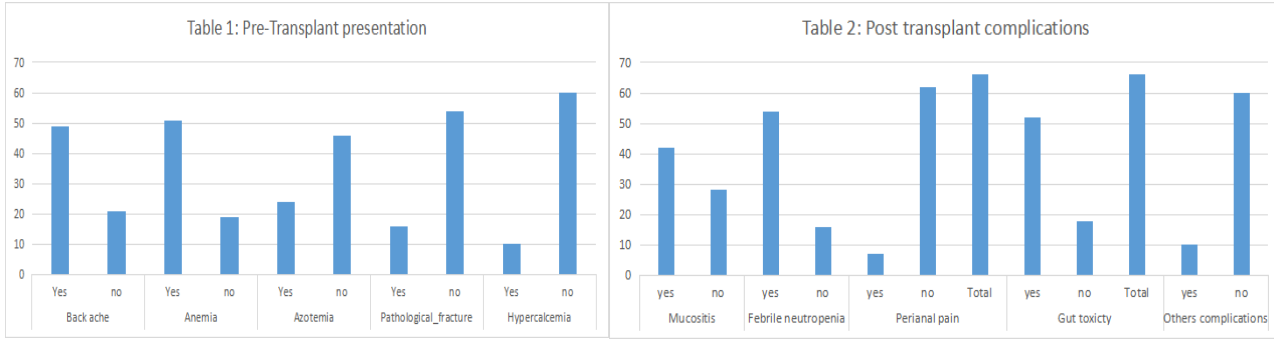
The study included seventy patients who underwent ASCT with non-cryopreserved stem cells for MM between January 2009 and September 2023 at Armed Forces Bone Marrow Transplant Centre, Rawalpindi Pakistan. Patients were followed up to day +100 post-transplant in terms of their platelets and neutrophil engraftment, transplant related mortality, its associated complications and duration of hospitalisation.

RESULTS:

The median age of the patients at the time of transplant was 49.97(+9.79) years. Male to female ratio was 3:1. The most common presenting symptom was backache (70%) while anaemia was the usual initial laboratory findings (73%). The Mobilization strategy in the majority of patients (70%) was Chemotherapy granulocyte colony stimulating factor, and most of the patients (55%) were in complete remission (CR) at the time of ASCT. The conditioning regimen used commonly (85%) was Melphalan 200 mg/m². The median days for engraftment of neutrophils and platelets were 11(IQR 10.75-12) days and 16 (IQR 15-18) days, respectively. The median duration of hospitalisation after transplant was 14 days (IQR: 13 to 16). Febrile neutropenia was documented in 80.3% patients. Overall and disease-free survival was 100% at day 100.

CONCLUSION:

Non-cryopreserved stem cells offer a cheaper, convenient and effective alternative for the cryopreserved stem cells. Non-cryopreserved stem cells were associated with rapid neutrophil and platelet engraftment and should be preferred stem cell source in resource limited centres.



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KEYWORDS:

Multiple Myeloma, Autologous stem cell transplant, Engraftment