

ABSTRACTS

PRE-TRANSPLANT MEDICAL EVALUATION: A MULTIDISCIPLINARY APPROACH

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Conventional autologous and allogenic hematopoietic stem cell transplants (HSCT) are lifesaving or life extending medical procedures but associated with significant risk for non-infectious and infectious complications. The center for international blood and marrow transplant research estimates that worldwide about 100000 transplants are performed yearly. The frequency of transplantation is varied widely from country to country, with a close association of transplant rates with gross national income (GNI) per-capita. Appropriate indication for transplant is mandatory for these rigorous procedures. Hematological malignancies, bone marrow failure syndromes, inherited immune deficiencies, hemoglobinopathies and inherited metabolic disorders are usual indications for BMT. Sources of hematopoietic stem cells are crucial. Patient evaluation includes psychosocial and systems evaluation. Foundation for the Accreditation of cellular therapy (FACT) is required. General guidelines for patient eligibility are chemo sensitive, adequate performance status, adequate non-hematopoietic organ function, ability to provide informed consent and adequately matched available donor or adequate collection of autologous stem cells. Exclusion criteria include chemo refractory, life expectancy severely limited by other illness, inability to tolerate preparative regimen and pregnancy. Relative contraindications are major medical comorbidities, major psychiatric illness and lack of insurance/financial resources. Comorbidities are cardiac arrhythmia, EF \leq 50%, body mass index \leq 35 kg/m², serum creatinine $>$ 2 mg/dl and EFV1 \leq 65%. Allogeneic donor evaluation is also vital and includes HLA typing for HLA-A, -B, -DRBI; screening of transmissible diseases, laboratories, consents and notifications.

Keywords: Pre-Transplant, hematopoietic stem cell transplant, medical evaluation

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