

THE FIRST 18 MONTHS OF ACTIVITY IN THE BONE MARROW TRANSPLANTATION DEPARTMENT OF THE COLTEA HOSPITAL.

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The Department of Bone Marrow Transplantation in Coltea Hospital was accredited in April 2013 and since 2014 operates within the National Programme for Organ, Tissue and Human Cells Transplantation.

The first transplant was performed in December 2013 by own funds while the other procedures were performed after obtaining the financing from the National Programme.

Until 1st of July 2015 we harvested peripheral hematopoietic stem cells from 28 patients of which in 22 cases we performed autologous peripheral stem cells.

Peripheral stem cell harvesting was performed initially at the Fundeni Institute using a Cobe Spectra machine (first two cases) and later in our compartment using Optia Spectra equipment.

Patients undergoing apheresis were diagnosed with multiple myeloma (MM) in 13 cases and lymphoproliferative diseases in 15 cases: Hodgkin's lymphoma (HL) 9 cases and non-Hodgkin's lymphoma (NHL) - 9 cases.

Mobilization regimens consisted of cyclophosphamide and filgrastim for myeloma cases, respectively DHAP, IGEV or Etoposide associated with filgrastim for patients with lymphoma. In one case of NHL treated with multiple lines of chemotherapy and radiotherapy we associated Plerixafor. In another case of NHL, with an allergy to filgrastim, we used IGEV regime for mobilization without adding growth factor, but we added Plerixafor in evening previous to the apheresis. The number of harvested CD34 cells ranged from 2.014 to 19.3×10^6 / kg. Graft cryopreservation was performed in the Stem Cell Bank of the Fundeni Institute

The patients who underwent autologous transplantation (22) were diagnosed with MM in 10 cases, LH in 9 cases and NHL in 3 cases. Conditioning regimens consisted of Melphalan 200 for myeloma cases and BEAM for lymphoma patients. The infused grafts had cellularity ranging from 2.57 to 19.3×10^6 CD34 cells/kg and the median engraftment duration was 11 days for neutrophils and 14.5 days for platelets.

Follow-up duration ranges from 15 to 565 days. Of the transplanted patients 21 are alive, 2 cases of MM and 2 of LH have relapsed, and in one case a second neoplasia was diagnosed NHL; the remaining 16 cases are in continuous remission.