

EFFICACY AND SAFETY OF AUTOLOGOUS TRANSPLANT WITH NON-CRYOPRESERVED PERIPHERAL BLOOD STEM CELLS IN MYELOMA AND LYMPHOMA IN ALGERIA. 10 YEARS' EXPERIENCE

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Introduction: The storage of harvested stem cells, in standard refrigerators at +4°C, is a simple and inexpensive alternative to cryopreservation for patients living in countries with limited resources. We present the 10 years' experience of our single centre in Algeria using non-cryopreserved stem cells, in myeloma and lymphoma patients.

Patients and methods: 574 autologous stem cell transplantation (ASCT) was carried out (420 MM and 154 lymphoma). The products of the aphaeresis were stored in a conventional blood bank refrigerator at +4°C. The conditioning regimen started once a minimum of 2×10^6 CD34+cell/kg in MM or 3×10^6 CD34+cell/kg in lymphoma was obtained.

Results: In MM patients, the median age was 54 years. The median CD34+ cell count was $3,2 \times 10^6$ /kg. The ANC > 0,5 G/L was 9 days and the median platelet count was day 13 (range; 9 to 39). TRM at 100 days was 3,5%. The OS at 5 years was 68% and the median post-transplant PFS was 47 months. 41% of patients relapsed and 28% died after disease progression. The median follow-up was 52 months. 98 Hodgkin's lymphoma and 56 non-Hodgkin's lymphoma, were auto grafted. The median age at ASCT was 28 and 33 years respectively. The median CD34+ cell count was $4,25 \times 10^6$ /kg (NHL) and $4,14 \times 10^6$ /kg (HL) of CD34+. The ANC > 0,5 G/L was 14 days and 15 days in HL and NHL, and the platelet > 20 G/L was 16 days and 17 days in HL and NHL. The OS at 5 years was 76% and 67% in HL and NHL respectively. TRM at 100 days was 5% in HL and 12,5% in NHL.

Conclusion: This study demonstrates the feasibility of intensified therapy followed by autologous non-cryopreserved PBSCs infusion in MM and lymphoma patients.