

Description

In this retrospective study concerning the Adolescent and Post-Adolescent (APA) patients, we have found several elements that were present in existing studies from the SFGM-TC register, in particular for risk factors of severe chronic and acute Graft-*versus*-Host Disease (GvHD) and the impact of HLA matching on Non-Relapse-Mortality (NRM) [1]. It was found that the use of Peripheral Blood Stem Cells (PBSC), the increasing donor's age and the receiver's age as risk factors of severe chronic GvHD. The use of Anti Thymocyte Globulins (ATG) or post-transplant cyclophosphamide was protective in this work as in various studies.

In a former study from the SFGM-TC register published in 2015, we studied the risk factors of sclerotic chronic GvHD in a cohort of 705 consecutive patients between 2005 and 2010 with the aim of confirming the risk factors (the use of Total Body Irradiation (TBI) and PBSC) that had been revealed in a large American study from Seattle [2,3]. The recipient's age and the use of PBSC were found as risk factors so the PBSC deleterious effect was confirmed. The patients were 3 to 70 years old with a median of 48 years old. Age was studied as a continuous variable and younger patients were shown to be at a greater level of risk. At this stage the age groups and the donor's age had not been unfortunately studied as a risk factor. The protective factors were the ATG use and cord blood as stem cells source which has been confirmed by many other studies.

Regarding the risk factors for severe acute GvHD (grade III and IV), we found in this APA patient's study: Active disease at transplant time and HLA matching (mismatch unrelated donor, matched unrelated donor and haplo-identical donor compared to sibling donor).

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