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Inside Haematologica: the impact of age on the outcome of allogeneic stem cell transplantation

Allogeneic stem cell transplantation is a fundamental therapeutic option for many patients with hematologic disorders. For instance, it is the only curative treatment for patients with non-malignant disorders such as thalassemia major[1,2] or paroxysmal nocturnal hemoglobinuria.[3,4] Its role might be sharply declining in chronic myeloid leukemia,[5-8] but new indications are constantly emerging.[9-15]

Allogeneic stem cell transplantation is remarkably effective and safe in children,[16-20] whereas transplant-related morbidity and mortality is directly related to age in adults and unacceptable in older patients undergoing unrelated-donor transplantation.[21,22] Attempts have been made to reduce them by adopting reduced-intensity conditioning regimens.[22-27]

In this journal's issue de la Cámara and co-workers[28] report data showing no significant difference in transplant-related mortality and morbidity between elderly patients (aged 55-59) and young adults (aged 20-40) receiving allogeneic stem cell transplantation at a single institution. As underlined by the authors, the outcome of elderly patients may be determined more by the severity of the underlying disorder than by age itself. Their data suggest that age alone (between 50 and 59) should not be an absolute barrier to conventional allogeneic stem cell transplantation from an HLA-identical sibling donor.

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