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EVALUATION OF ELDERLY PATIENTS UNDERGOING ALLOGENEIC BONE MARROW TRANSPLANTATION: BRAZILIAN SINGLE-CENTER OUTCOMES

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INTRODUCTION

The emergence of new conditioning regimens and supportive therapies has made it possible for older patients to undergo allogeneic hematopoietic stem cell transplantation (allo-HSCT), offering a potentially curative therapy for patients who were previously not candidates for this procedure. However, data on this population remain scarce.

AIM

Evaluate elderly patients undergoing allo-HSCT at Hospital Beneficência Portuguesa de São Paulo

METHOD

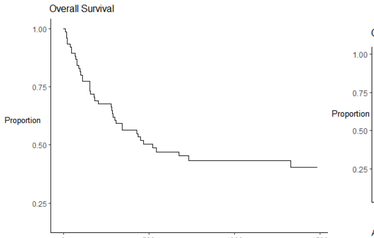
We evaluated elderly patients undergoing allo-HSCT at Hospital Beneficência Portuguesa de São Paulo, focusing on overall survival (OS), causes of early mortality, and the incidence of graft-versus-host disease (GVHD). Data from all patients aged 60 years or older undergoing allo-HSCT to treat hematological malignancies were collected retrospectively.

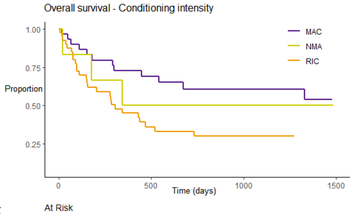
RESULTS

Seventy-seven patients met the inclusion criteria for this analysis. The median age was 64 years (IQR 62-67). Forty percent of the transplants were from matched sibling donors. Most patients had good performance status (ECOG 0-1; 74%) and a low burden of comorbidities Hematopoietic Cell Transplantation-specific Comorbidity Index [HCT-CI <3; 52.7%]). A reduced-intensity conditioning regimen was administered to 51.9% of patients, while 40.3% received a myeloablative conditioning (MAC) regimen. There were 15 early deaths (within 100 days of follow-up), primarily due to infection (66.7%), followed by disease relapse (26.7%) and veno-occlusive sinusoidal disease (6%). At forty days post–graft infusion, 92% of patients achieved neutrophil engraftment and 76% achieved platelet engraftment. Acute GVHD (grades 1-4) occurred in 53% (95% CI, 41-64) of patients by day +100, and chronic GVHD of any kind occurred in 22% (95% CI, 13-33) at 1-year post-transplant. OS was 56% (95% CI, 46-69) at 1 year and 43% (95% CI, 33-57) at 3 years. Patients who received a MAC regimen had better outcomes at 1 year of follow-up compared to those who received reduced-intensity conditioning (RIC, 73% vs 45%).

Table 1. General Characteristics

Characteristics	N = 77[1]
Age at HSCT	64.0 (62.0, 67.0)
Type	
Related	31 (40.3%)
Haploidentical	27 (35.1%)
Unrelated	16 (22.1%)
Mismatched unrelated	2 (2.6%)
Disease status pre HSCT	
Progressive disease	10 (13.3%)
Stable Disease	16 (21.3%)
DRM+	1 (1.3%)
Unknown	3 (4.0%)
Cytogenetic response	1 (1.3%)
Complete response	36 (48.0%)
Parcial response	8 (10.7%)
Conditioning intensity	
MAC	31 (40.3%)
NMA	6 (7.8%)
RIC	40 (51.9%)





NMA 6 (7.8%)
RIC 40 (51.9%)

Table 2. Overall Survival

	30 days	100 days	180 days	365 days	1000 days
Overall	94% (88%, 99%)	80% (72%, 90%)	71% (61%, 82%)	56% (46%, 69%)	43% (33%, 57%)

CONCLUSIONS

Emerging new therapies and best supportive care have made allo-HSCT a feasible procedure in the population over 60 years, with an increase in OS when compared to other therapies. Therefore, age should not be considered as an obstacle for elderly patients. In the present report, better outcomes with MAC regimens stem from an indication bias, ie, fitter patients were considered eligible and selected for more intensive conditioning.

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