were included (2,271 with PTCy and 2,479 with ATG). The median age was 61 years (range: 18-81), and 44% were female. AML was the most common diagnosis (54%), followed by MDS (30%) and ALL (16%). 45% received a myeloablative conditioning regimen, and peripheral blood was the preferred graft source (90%). Except for HLA matching (HLA 7/8 in 26% of the PTCy group and 9% in the ATG group) and the year of transplant (PTCy was more common in later years), all variables were well-balanced. 2y-RFS was 49% for PTCy and 43% for ATG ($p = 0.001$). 2y-mod/sev cGVHD was 12% for PTCy and 23% for ATG ($p < 0.001$). RFS improved with PTCy (HR = 0.83, 95%CI 0.76-0.91, $p<0.001$) as well as mod/sev cGVHD (HR = 0.45, 95%CI 0.38-0.53, $p < 0.001$), compared to ATG. OS also improved (HR = 0.77, 95%CI 0.70-0.85, $p < 0.001$), mainly because of lower NRM (HR = 0.66, 95%CI 0.58-0.76, $p < 0.001$). There was no effect on relapse (HR = 0.95, 95%CI 0.85-1.07, $p = 0.44$). Grades II-IV (HR = 0.60, 95%CI 0.54-0.67, $p < 0.001$) and III-IV aGVHD (HR = 0.44, 95%CI 0.36-0.55, $p < 0.001$) were also less common with PTCy compared to ATG. The same results held when (1) HLA 7/8 mismatched HCT were excluded or (2) when analyses were stratified by transplant year. **Discussion and conclusion:** Within this large and contemporary CIBTMR database, outcomes with PTCy-based GVHD prophylaxis were better than ATG in every studied aspect except relapse, leading to higher RFS and OS and improved GVHD control. Although registry-based, the groups were well-balanced, and the large patient cohort (nearly 5,000 individuals) enabled us to develop a Cox model that controlled for all possible confounding factors, minimizing bias. Our findings suggest that PTCy should be preferred over ATG in unrelated donor transplantation.

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POSTTRANSPLANT CYCLOPHOSPHAMIDE-BASED HAPLOIDENTICAL TRANSPLANTATION, WITH MMF 30 MG/KG, COMPARED WITH UNRELATED DONOR TRANSPLANTATION WITH ATG 6 MG/KG, WITH BONE MARROW OR PERIPHERAL BLOOD STEM CELL GRAFTS

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Introduction: Several adaptations have been reported since the introduction of posttransplant cyclophosphamide (PTCy)-based haploidentical (Haplo) hematopoietic cell transplantation (HCT) using a non-myeloablative platform and a bone marrow (BM) graft source. Reduced doses of mycophenolate mofetil (MMF) have been successfully tested, as well as combinations with earlier administration of immunosuppression, postponing the second PTCy dose to D+5, and using peripheral blood grafts (PBSC). **Aim:** This study aims to compare the outcomes of PTCy-based haploidentical transplantation with MMF at 30 mg/kg to a concurrent cohort of unrelated donors (URD) who received ATG-based GVHD prophylaxis at 6 mg/kg prior to transplantation, using either BM or PBSC grafts. **Material and methods:** This single-center observational study included patients with hematological malignancies who underwent Haplo or URD HCT between November 16, 2016, and December 31, 2024. Univariable analyses were performed using Kaplan-Meier and cumulative incidence methods. Multivariable analyses were conducted with Cox models, with the URD-BM group serving as the reference category unless otherwise specified. The local ethics committee approved this study, which was registered at ClinicalTrials.gov under NCT02759822. **Results:** We included 174 patients, with a median follow-up of 32 months. Patients receiving BM were younger (median age: 15 vs. 34 years), and they were more likely to receive a myeloablative (MAC) regimen (92% vs. 75%, compared to PBSC); the frequency of a MAC regimen was also higher with URD (94% vs. 74%, compared with Haplo). 18% of the URD were HLA 7/8 mismatched, while the others were 8/8 matched. Other patient characteristics were well-balanced. Two-year overall survival (OS) for Haplo-PBSC was 47%, which was not significantly lower than that for URD-BM (70%), URD-PBSC (61%), and Haplo-BM (64%, $p = 0.18$). In multivariable analysis, Haplo-PBSC was linked to a higher risk of death (HR = 2.28, $p = 0.03$) compared to URD-BM, mainly due to higher non-relapse mortality (HR = 2.67, $p = 0.02$). The relapse rate was similar across the groups. PBSC grafts, whether with URD (HR = 1.95, $p = 0.04$) or Haplo (HR = 3.13, $p < 0.01$) donor, significantly increased grades II-IV aGVHD, while only the latter was non-significantly associated with grades III-IV aGVHD (HR = 2.39, $p = 0.09$). The only protective factor against cGVHD, across all grades and moderate to severe cases, was the combination of URD and BM (HR = 0.54, $p = 0.03$; and HR = 0.43, $p = 0.02$, respectively), compared with Haplo with BM or PBSC or URD with PBSC. **Discussion and conclusion:** Our results show that OS is lower with a Haplo-PBSC transplant compared to a URD or Haplo-BM transplant due to higher non-relapse mortality. PBSC increases all severe forms of aGVHD, and the rate of moderate or severe cGVHD is higher with Haplo with BM or PBSC or URD with PBSC, compared to URD with BM. More effective cGVHD prophylaxis for PBSC grafts is needed. In summary, we have demonstrated that MMF 30 mg/kg may reduce survival when combined with Haplo-PBSC. However, it seems to be safe for Haplo-BM despite higher rates of cGVHD compared with URD-BM.

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PREVALÊNCIA DAS MUTAÇÕES QUE POSSAM CONFERIR RESISTÊNCIA AOS MEDICAMENTOS UTILIZADOS NO TRATAMENTO DO CITOMEGALOVÍRUS

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