

30 mg/kg Haplo HCT. **Methods:** This single-center study was conducted in a public hospital in Rio de Janeiro, Brazil. We included all patients who underwent Haplo or URD HCT for acute leukemia or myelodysplasia between 2016 and 2024. URD received 6 mg/kg ATG with a Calcineurin Inhibitor (CNI) and an antimetabolite. Haplo received PTCy combined with a CNI and approximately, due to rounding, MMF 30 mg/kg. All follow-up times were longer than 30 days. Survival and cumulative incidence curves were carried out with Kaplan-Meier and Gray methods and compared with logrank and Gray tests. Propensity Score (PS) weighted-Cox models were performed to control for relevant variables. The study was approved by the Ethics Committee and registered at ClinicalTrials (NCT02759822). **Results:** With a median follow-up of 13- and 28-months, 74 Haplo and 83 URD were included, respectively. Except for conditioning intensity (reduced-intensity conditioning in 30% of Haplo and 6% of URD) and graft (peripheral blood in 51% of Haplo and 35% of URD), all other variables were relatively well-balanced. In the URD group, 82% were HLA 8/8 matched, while 18% were 7/8 matched. 2-y OS, for Haplo and URD, respectively, were 51% and 70% ($p=0.10$); 2-y RFS 51% and 64% ($p=0.23$); GRFS 22% and 47% ($p=0.01$); 2-y relapse 17% and 18% ($p=0.62$); 2-y NRM 32% and 17% ($p=0.08$); 2-y cGVHD 39% and 35% ($p=0.52$), 2-y moderate/severe cGVHD 22% and 15% ($p=0.49$); 6-month II-IV aGVHD 50% and 49% ($p=0.72$); and 6-month III-IV aGVHD 15% and 23% ($p=0.51$). In the PS-weighted model, only GRFS was different: HR=1.70 for Haplo vs. URD, $p=0.01$. In other PS-weighted models, nor OS, HR=1.50, $p=0.17$; PFS, HR=1.40, $p=0.24$; relapse, HR=1.00, $p=0.97$; II-IV aGVHD, HR=1.10, $p=0.63$; III-IV aGVHD, HR=1.30, $p=0.56$; cGVHD, HR=1.40, $p=0.24$; nor moderate and severe cGVHD, HR=1.70, $p=0.23$ were statistically different, although, numerically, most outcomes favored the URD group. **Discussion:** Our results suggest it might not be safe to systematically offer Haplo transplants for patients with suitable URD. PS-weighted GRFS was statistically improved with URD, compared with Haplo. Overall, our Haplo results were comparable with those already reported, although, in most comparisons of Haplo versus URD, ATG was not given to all URD patients. Importantly, GVHD control was not hampered by MMF reduction from 45 mg/kg to 30 mg/kg in the Haplo arm, even in a highly miscegenated country like Brazil. Time to transplant is usually shorter in Haplo, and therefore we cannot rule out survival bias favoring the URD group. Although not randomized, it was a relatively large sample that included patients with only hematologic malignancies.

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CANCER RELAPSE OR INFECTION? A SYSTEMATIC REVIEW ON LEISHMANIASIS AFTER BONE MARROW TRANSPLANTATION

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Objective: Evaluate the factors associated with infection by *Leishmania* spp. in Bone Marrow Transplant (BMT) recipients due to hematological malignancies, in relation to clinical profile, tumor diagnosis, infection treatment, general mortality, infection relapses and graft infection. **Material and methods:** The search was carried out on the PUBMED, Embase and Google Scholar platforms using the terms “Leishmaniasis”, “Hematopoietic Stem Cell Transplant”, and the appropriate Boolean operators. Rayyan® and Microsoft Excel® software were used to select articles and interpret results. **Results:** 72 articles were found. Six duplicates and 54 articles that did not focus on the association between leishmaniasis and BMT due to hematological malignancies were excluded. Only 12 articles were included in the review, from 2001 to 2023. Of these, 7 studies were series or case reports on leishmaniasis in patients undergoing BMT, totaling 9 clinical cases. 78% of patients were male, with a mean age of 41-years. Lymphoblastic and myeloid leukemias predominated (55.6%) and 66.7% of patients underwent allogeneic BMT. 55.6% of patients were affected by Graft-Versus-Host Disease (GVHD) and 33.3% had associated infections (cytomegalovirus and *Aspergillus* spp.). The most common symptoms of the infection were: pancytopenia (88.9%); splenomegaly (55.6%); fever (44.4%); digestive involvement (22.2%); and skin or mucosal involvement (22.2%). The diagnosis was based on the presence of amastigotes in the bone marrow biopsy. Before diagnosis, 55.5% of patients were submitted to different clinical hypotheses: hemophagocytic lymphohistiocytosis (60.0%); viruses (20.0%); and acute GVHD (20.0%). The majority (88.9%) were treated with intravenous liposomal amphotericin B (L-AmB), which affected renal function in 25% of patients. 44.4% had recurrences of the infection (on average 4.3-months after the first treatment). Only one patient experienced allograft rejection and death. **Discussion:** Leishmaniasis is common in immunocompromised patients, especially due to acquired immunodeficiency syndrome. However, the literature has increasing descriptions of cases in transplant recipients, mainly kidney and liver transplants (the most common transplants). Few reports have been made in the literature about such infection in BMT, this being the only review on the subject in the literature. Infection with *Leishmania* spp. should always be considered in the differential of febrile pancytopenias, especially with splenomegaly. However, the clinic can be varied and the symptoms will not always be definitive. In the reality of BMT, it is difficult to clinically differentiate leishmaniasis from recurrences of hematological tumors and complications associated with transplantation, as they all present very similar and non-specific findings (such as fever, splenomegaly and pancytopenia). Immunosuppression, due to neoplasia or BMT therapy, makes the diagnosis of protozoosis even more difficult. **Conclusion:** Infection with *Leishmania* spp. in hematological patients, especially those undergoing hematopoietic stem cell transplantation, it should not be forgotten by the hematologist, as it can cause severe morbidity, mortality, and clinical complications, especially in cases of late diagnosis.

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