

for age. Only one patient in the LEC group died within the first 100 days of ASCT, showing a trend toward lower TRM. OS at 2-years for the two conditioning protocols was 85.31% for LEC and 55% for CBV, respectively ($p=0.001$). **Discussion:** The Autologous Stem Cell Transplantation (ASCT) is considered the consolidation treatment of choice for patients with relapsed Hodgkin's or non-Hodgkin's lymphoma, and the first line of treatment for eligible patients with aggressive T-cell or mantle cell non-Hodgkin's lymphoma. In this study, the LEC protocol, the conditioning regimen studied, proved to be safe and in line with what is desired for the treatment of patients with lymphoma today. With the scarcity and sometimes discontinuation of some chemotherapy drugs in Brazil, the use of alternative regimens, such as the one in this study, which demonstrated efficacy and safety, is corroborated. **Conclusion:** LEC proved to be a safe protocol, with OS at 24-months being higher in the LEC group than in the CBV conditioning groups. Despite the good results with LEC, unfortunately, there is a new shortage of both lomustine and carmustine in Brazil, which will require the use of new alternative protocols. **Conflicts of interest:** The author declares no conflict of interest.

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RETROSPECTIVE ANALYSIS OF CHIMERISM ON PEDIATRIC PATIENTS WITH LEUKEMIA POST ALLOGENEIC STEM CELL TRANSPLANT

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Introduction: Allogeneic Stem Cell Transplant (ASCT) is a curative strategy for various hematological diseases. Following ASCT, chimerism analysis becomes instrumental in assessing engraftment success, guiding immunosuppression strategies, and determining the necessity of interventions such as Donor Lymphocyte Infusion (DLI). In leukemia cases, chimerism evaluation is a crucial tool for predicting and monitoring disease relapse. However, the routine chimerism and its efficacy in the pediatric population remain subjects of ongoing debate, necessitating further studies. **Objective:** Assess the correlation between chimerism levels, timing of testing, and their predictive value for disease relapse and survival among pediatric patients with leukemia post-ASCT. **Materials and methods:** This retrospective study enrolled pediatric patients diagnosed with leukemia who underwent ASCT. Patients with other hematological diseases and those who received autologous stem cell transplants were excluded from the analysis. This retrospective study was conducted in a tertiary care center, and the data was collected from 2021 until January 2024. Demographic characteristics, survival, and clinical/laboratory findings, including chimerism analysis of 1-year after ASCT via immunophenotyping using flow cytometry. The Chimerism analysis was performed at

six checkpoints (D+30, D+60, D+100, six months, nine months, and 12 months). The statistical analysis was made using descriptive statistics. **Results:** Of the 90 patients cohort, 85 (94%) patients underwent a single transplant, while 5 (6%) patients had two bone marrow transplants. Among the patients who achieved successful engraftment, 19 (21%) experienced disease relapse, with 9 relapses occurring within the first year post-ASCT. Notably, all relapses between D+100 and 12-months post transplant occurred in patients with complete chimerism. The 9-month checkpoint exhibited the lowest patient attendance, with only 44% of patients having complete chimerism data and 36 missing results. Conversely, the D+60 checkpoint had the fewest missing tests, with only 13 absences. The initial three checkpoints (D+30, D+60, D+100) demonstrated higher attendance rates than later. The majority of deaths occurred during the D+100 period, with 6 out of 9 relapses occurring during this timeframe. It was also the period with the higher percentage of mixed chimerism, having 22% in the D+30, 21% in the D+60, and 17% in the D+100. **Conclusion:** Overall, these findings suggest that chimerism analysis, particularly at critical time points such as D+100, is valuable to help predict disease relapse in pediatric patients post-transplant and their survival. However, challenges in patient attendance at certain checkpoints indicate the need for improved monitoring strategies to optimize patient outcomes.

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CONTROLLING PATIENTS' WEIGHT: IS THERE A RELATIONSHIP BETWEEN OBESITY AND GRAFT-VERSUS-HOST DISEASE IN BONE MARROW RECIPIENTS? A SYSTEMATIC REVIEW

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Objectives: This review aims to evaluate the impact of obesity on Bone Marrow Transplant (BMT) recipients diagnosed with Graft-Versus-Host Disease (GVHD), in different age groups. **Material and methods:** A search was carried out on the PubMed and Virtual Health Library platforms, using the descriptors "Graft-versus-Host Disease" and "Obesity". Articles in English published between 2011 and 2021 were selected. Rayyan[®] and Microsoft Excel[®] software were used to select manuscripts and interpret results. **Results:** 47 articles were found. 7 duplicates and 32 articles that did not focus on the relationship between obesity and GvHD were removed. 8 articles were included in this study, of which 2 are meta-analyses and 6 are retrospective cohorts. 24.9% of BMT recipients are obese (Pereira et al., 2015). Fuji et al. (2015) points out that the three main prognostic nutritional factors in BMT are obesity, diabetes mellitus and liver dysfunction. In children, the meta-analysis by Yaseri et al. (2021) showed a higher