

59 anos. A região Sul apresenta o maior percentual de doadores cadastrados, enquanto a Nordeste concentra o menor, embora seja a segunda região mais populosa do país, com cerca de 54.658.515 habitantes. As análises demográficas auxiliam a notar pontos que merecem atenção para ampliar a base de doadores no país. **Conclusão:** De toda forma, estudos devem avançar para entender o perfil demográfico dos doadores e criar estratégias para maior captação de voluntários, bem como garantir a fidelização dos doadores de medula óssea já cadastrados no REDOME, o que continua sendo desafiador.

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BACTEREMIA IN PATIENTS UNDERGOING BONE MARROW TRANSPLANTATION: WHAT SHOULD THE HEMATOLOGIST KNOW?

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Objective: To evaluate the clinical, microbiological and antibiotic resistance profile of strains isolated from bacteremia samples, in Bone Marrow Transplant (BMT) recipients in a specialized tertiary unit, in Fortaleza, Ceará (Brazil). Furthermore, evaluate possible measures to prevent these diseases in Hematology services. **Material and methods:** A Microsoft Excel® spreadsheet with clinical and laboratory data from BMT recipients with bacteremia was created and completed over the years 2020–2023. The data was analyzed by the group of authors. The study was approved by the Research Ethics Committee, opinion number 3.697.674. The bacterial group was considered resistant when more than 30% of its strains, isolated from bacteremia in BMT recipients, did not show inhibition by the antibiotic tested. **Results:** 34 patients were included in the study, 32.3% of whom were women. 61.6% of patients had bacteremia due to *Pseudomonas* spp. (20.6%), *Staphylococcus* spp. (20.6%) and *Klebsiella* spp. (20.6%), followed by *Sphingomonas* *Paucimobilis* (14.7%), *E. Coli* (11.8%) and others (11.8%). *Pseudomonas* spp. showed resistance to: amikacin (57.1%), cefepime (85.7%), ceftazidime (85.7%), ceftriaxone (42.9%), cefuroxime (51.1%), colistin (42.9%) and nitrofurantoin (42.9%). *Staphylococcus* spp. showed resistance to: benzylpenicillin (42.9%), erythromycin (71.4%) and clindamycin (42.9%). *Klebsiella* spp. showed resistance to: ampicillin (71.4%), ampicillin with sulbactam (57.1%), cefepime (85.7%), ceftazidime (85.7%), cefuroxime (85.7%), ciprofloxacin (85.7%), colistin (85.7%), linezolid (57.1%), nitrofurantoin (85.7%) and rifampin (85.7%). *E. coli* showed resistance to: ampicillin (75.0%), ampicillin with sulbactam (75.0%), cefuroxime (50.0%), ciprofloxacin (50.0%), colistin (50.0%), streptomycin (50.0%) and rifampicin (50.0%). *Sphingomonas paucimobilis* did not show significant antimicrobial resistance. **Discussion:** Many factors are associated with bacteremia in BMT recipients, such as cytomegalovirus, neutropenia, mucositis, use of antimicrobials, among others (Garnica et al, 2022). In this study,

Gram-Negative (GN) bacteremia predominated, a finding consistent with the literature, despite the increased prevalence of *Staphylococcus* spp., which is mainly associated with catheter infections. Early identification of these pathogens, with appropriate treatment, is capable of containing the hospital spread of multiresistant organisms. The Hematology, BMT and Hospital Infection Control services must work together to identify these cases, look for causal situations and develop a multidisciplinary strategy to prevent infections associated with hospital care, especially in immunosuppressed patients, such as those in this study. **Conclusion:** GN bacteria were the main sources of infection and multidrug resistance in the present study. Multidisciplinary coordination between the Hematology and Hospital Infection Control Committees is adequate for the prevention and treatment of these conditions. Contrary to the literature, there were a large number of infections caused by *Staphylococcus* spp., reinforcing the need for surveillance in patients using long-term catheters, in addition to the correct indication of this procedure in BMT recipients.

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GENERATION OF NEW REGULATORY T CELLS AND INCREASED IL-10 LEVELS IN SYSTEMIC SCLEROSIS PATIENTS TREATED WITH AUTOLOGOUS HEMATOPOIETIC STEM CELL TRANSPLANTATION

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Background: Systemic Sclerosis (SS) is an autoimmune disease characterized by immune dysregulation, vascular damage, and fibrosis of the skin and internal organs. Autologous Hematopoietic Stem Cell Transplantation (AHSCT) has been used as a therapeutic option for patients with severe and progressive forms of the disease. Immunological monitoring studies demonstrate that AHSCT generates a more self-tolerant lymphocyte repertoire, increases immunoregulatory mechanisms, and promotes a more anti-inflammatory immune profile in patients with autoimmune disorders. However, these investigations require further detailing. **Methods:** In this study, we evaluated the frequency of Naïve Regulatory T Cells (Tregs), serum levels of Inflammation and immunoregulation-related cytokines and clinical data. Peripheral Blood Mononuclear Cell (PBMC) samples from 14 SSc patients