

Prevalence of blood culture contamination in the collection of hematopoietic progenitor cells and blood components

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One of the risks present in patients receiving transfusion of hemocomponents or hematopoietic progenitor cells (HPC) during autologous or allogeneic transplantation is the administration of a product with bacterial contamination, increasing the possibility of an adverse event related to the transfusion, however, contamination can occur during the process, from the collection process to its infusion. In determining the prevalence of blood culture contamination in the collection and procedures performed for each blood component. The true detection of a positive culture represents a challenge between the timing of the result and the identification of true pathogens and contaminants. Through a retrospective study, we analyzed the results of blood cultures performed from 2013 to 2020, including

collections of HPCs from mobilized peripheral blood (MPBS) and bone marrow (BM); and blood components (platelets, erythrocytes, and plasma) obtained by apheresis using cell separators. Each blood culture. Fourteen species of contaminating microorganisms were identified, with a greater predominance of *Staphylococcus epidermidis* and *Micrococcus* spp representing 37% and 11% among the other microorganisms identified. *Acinetobacter* spp. 7.4% (2/27), *Clostridium* spp. 3.7% (1/27) and *Salmonella* spp. 3.7% (1/27) were also reported. The inferences of contamination in the blood culture results is lower than the described ranges, considering it the reference standard of contamination more rigorous than other institutions <1.4%.

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