Frequency of Isolated Bacteria from Blood Culture of Patients in the Hematology Unit at Pediatric SubSpecialty Hospital of Dr. Sheikh in Mashhad in the first 9 months of the year 2017-2018

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Introduction: Bloodstream infection is one of the most important causes of mortality in patients hospitalized in the hospital, especially in hematology wards.

Materials and Methods: In this cross-sectional study, conducted over 9 months in Dr Sheikh hospital from April to December 2017, 2958 blood samples from patients in different parts were studied, which 492 samples belonged to the hematology ward. Blood samples were inoculated into BD and were placed inside the BD machine via automation. Then positive samples on usual subculture environments were identified by morphological and biochemical tests.

Results: Among 492 samples of hematology ward, 128 were positive. Isolated pathogens included 27 coagulase-negative Staphylococcus (21%), Burkholderia and yeast each 15 (11.7%), Stenotrophomonas 13 (10.1%), Staphylococcus aureus 12 (9.37%), 6 of them were MRSA, non-fermented gram-negative bacteria 11 (8.99%), E. Coli 7 (5.46%), Klebsiella 5 (3.9%), Enterococcus 4 (3.1%), Candida, Diphtheroid and Streptococcus pneumonia 3 (2.34%) Enterobacter, Micrococcus and Staphylococcus haemolyticus 2 (1.56%) and pseudomonas aeruginosa and alpha hemolytic Streptococci 1 (0.8%).

Conclusion: According to the results of this study and the high variation of bacteria in blood culture samples in the critical section of hematology, it is more important to pay attention to children at risk for blood infections and to reduce the risk factors.