

The 6 Month Study of Antibiotic Resistance of Bacteria Isolated From Children with Septicemia In Tehran

Hamed Memariani¹; Mojtaba Memariani²; Neda Sadat Shokouhi Mostafavi³; Amin Ravaei⁴; Seyyed Khalil Shokouhi Mostafavi*⁵

1-MSc of Molecular and Cell Biology, Faculty of Basic Science, University of Mazandaran, Babolsar. Member of Young Researchers Club, Mazandaran, Iran

2- Department of Bacteriology, School of Medical Sciences, Tarbiat Modares University, Tehran, Iran

3-Member of Iranian Society of Microbiology, Iran

4-Department of Biology, University of Kharazmi, Karaj, Iran

5-MSc student of Microbiology, Department of Biology, Islamic Azad University, Tonekabon Branch, Iran

h.memariani@gmail.com

Background & Objectives: Septicemia is an important cause of death in infants and children annually. Various microorganisms such as bacteria can cause septicemia. The purpose of this study is to identify the bacterial agents causing septicemia and also determining their antibiotic resistance pattern.

Methods: In this study, samples were taken of children with septicemia who were hospitalized in different wards of Bahrami hospital. Then, by performing standard tests, the causes of septicemia were determined and the antibiotic resistance were investigated.

Results: Out of 32 cases of positive blood cultures, following bacteria has been obtained: 23 (71.87%) cases of coagulase negative Staphylococci, 4 (12.5%) cases of *Escherichia coli*, 3 cases of *Klebsiella pneumoniae*, 1 (3.13%) case of *Enterobacter aerogenes* and 1 (3.13%) case of *Enterobacter cloacae*. Most antibiotic resistance of bacteria causing septicemia was related to amikacin and ampicillin.

Conclusion: Given the importance of antibiotic resistance in bacterial infections, septicemia, especially in infants, it is recommended that before prescribing antibiotics, antibiogram tests to be performed.

Keywords: Antibiotic; Septicemia; Tehran