The study was performed to investigate the role of ampicillin and amoxicillin in the treatment of Gram-positive bacteria and to assess the effectiveness of chloramphenicol, norfloxacin, and ciprofloxacin. The results showed that ampicillin, amoxicillin, and cefotaxime were the most effective antibiotics against Gram-positive bacteria, while vancomycin was less effective. The study also demonstrated the importance of antibiotic susceptibility testing in determining the appropriate treatment for infectious diseases.

Keywords: Ampicillin, Amoxicillin, Cefotaxime, Vancomycin, Chloramphenicol, Norfloxacin, Ciprofloxacin.
Sensitivity of Bacteria Isolated from Blood in Leukemia Patients Against Antibiotics and some Antineoblastic Drugs and the Bactericidal Activity of Leukemia Patients Serum

Muhsin A. Essa
Department of Biology
College of Science
Mosul University

Delveen R. Ibrahim
Department of Biology
College of Science
Duhok University

ABSTRACT

This research was performed to study the sensitivity of bacteria isolated from bacteremia in leukemia patients against antibiotics and some antineoblastic drugs and studying the bactericidal activity of leukemia patients sera. The results showed that most of the gram positive bacteria were resistant in a high proportion to Ampicillin, Amoxicillin, Cefotaxime but they were sensitive to Vancomycin (100%), however gram negative bacterial isolates were absolutely resistant to Amoxicillin, Ampicillin, Vancomycin, Sulphamethoxazole Trimethoprime but they showed sensitivity toward Chloramphenicol, Norfloxacin and Ciprofloxacin. The effect of some antineoblastic drugs on studied bacteria showed that there was no effect of these drugs on most bacteria with the specific concentration used in this experiment except that of *S. aureus* and *S. epidermidis* which showed a limited sensitivity to Daunrubicin and *B. subtilis* which was more sensitive against Daunrubicin and Methotrexate. Findings showed that there are differences between the bactericidal activity of serum which was obtained from Acute Lymphoplastic Leukemia (ALL) patients and normal subjects which appears that have depletion in serum bactericidal activity of (ALL) patients (which infected by bacteremia and received chemotherapy drug) toward *E. coli*. However, results of *S. aureus* showed that there was no significant difference in bactericidal activity of serum against this bacteria by both the normal serum and patients sera.