

Introduction:

Drug Utilization Evaluation (DUE) can help identify and correct problems associated with irrational use of drugs. Considering lack of data regarding how rational vancomycin is being used, we evaluated this DUE study in a pediatric hospital for the first time to evaluate compliance with guidelines in terms of rational use of this valuable antibiotic.

Methods:

Study was conducted on patients admitted to Bu'ali Children's Hospital in the infectious disease unit, internal unit, emergency unit, and hematology department, during 6 months study period. All data including demographic, clinical and paraclinical information were collected. After the evaluation, the information was finally analyzed and checked by SPSS software.

Results:

Out of 220 patients studied in this research 112 (51.4%) were male and 108 (48.6%) were female. The mean± standard deviation (SD) age of entered patients was 1.1±2.14 months. The patients had an acceptable level of serum creatinine and according to The Harriet Lane Handbook, all were at a normal range and did not need dosage regulation. These patients had been hospitalized at least for one day and at most for 15 days. Out of 220 patients Vancomycin antibiotic a culture sample and sensitivity were sent to laboratory for 11(5%) patients. In three cases of the patients, skin complications were observed, hence, the medication was discontinued. Other complications, including neutropenia or renal failure and anaphylaxis, were not identified in any of the patients.

Discussion and Conclusion:

Taking account of the findings, it is necessary to compile instructions for logical use of Vancomycin, to equip and complete pharmaceutical care unit, to hold educational programs and to have a more tight supervision on the prescriptions of antibiotics in this hospital to prevent unwanted drug effects and antimicrobial resistance and ultimately to reduce health system cost .

Key words :Vancomycin, antibiotic, drug use evaluation, antibiotic resistance, drug utilization review