The Study of antibiotic resistance of microorganisms isolated in Yahya nejad Hospital, Babol (North of Iran), 1385

Abstract

Background and objectives: Resistance to antimicrobial agent is a world-wide problem and the existed reports are not the same. Aware of antibiotic resistant pattern of microorganisms in each hospital is important for controlling the nosocomial infections. This study was designed to determine the resistant pattern of microorganisms isolated in Yahya nejad hospital, Babol, north of Iran.

Material and Methods: In this descriptive study, organisms were isolated during 2006 from urine, blood, endotracheal tube, abscess, fluids (ascites, pleura, and synovia), wound, discharges and bone/marrow of both outpatients and inpatients in our hospital were studied. Their antibiotics resistances were evaluated by Kirby Bauer method.

Results: of 3114 culture specimens of admitted patients (female 1732, male 1382), 325 (10.4%) microorganisms were isolated. They were isolated from urine 162 (49.8%), blood 115 (35.4%), abscess 11 (3.4%), wound, 10 (3.1%) and discharge10 (3.1%). The most common microorganisms were Escherichia coli 107 (33%) and Staphylococcus epidermidis 69 (21.3%). Maximum resistance of E.coli is related to tetracycline (83.9%) and ampicillin (75%); and maximum resistance of S.epidermidis to oxacillin (89.2%) and penicillin (82.1%).

Conclusion: With regard to high antibiotic resistance (>70%) in this study, it seems that the early beginning and inappropriate dosage of antimicrobial agents may be associated with developing antibiotic resistance. Hence, it is highly recommended to prohibit the unnecessary prescription of antibiotics

Key words: Antibiotic resistance, microorganisms, Blood culture, E.coli