Abstract

Objective Determining the microbial aetiology spectrum and antibiotic resistance pattern of uropathogens causing urinary tract infections in hospitalised patients and outpatients. Methods A descriptive study was carried out between February 2005 and November 2008 at the San Buenaventura University's Clinical Laboratory in Cartagena. Antibiotic sensitivity was determined by the Kirby Bauer method. Results Out of the total specimens (1,384) analysed over the four-year study period, 455 of the urine samples (32.9 %) were culture positive, most (81.4 %) having come from females. The bacterium isolated most frequently was Escherichia coli (60.1 %) followed by Klebsiella pneumoniae (6.9 %), Pseudomonas aeruginosa (6.6 %), Proteus mirabilis (5.4 %) and Acinetobacter baumannii (1.4 %). The Gram-negative isolates displayed a high level of resistance to ampicillin (range 84.3-100 %), amoxicillin/clavulanic acid (range 66.5-80 %) and ciprofloxacin (range 40-57.9 %). Conclusion Gram-negative bacteria were responsible for urinary tract infections in the patients involved in this study. The most commonly isolated bacteria were E. coli. Empirical administration of a third-generation cephalosporin for initial treatment of urinary tract infections in this population appears prudent from the perspective of antimicrobial susceptibility.

Keywords

Bacteriuria, urinary tract infection, microbial sensitivity test, drug resistance, microbe.