

Incidence of Urinary Tract Infections (UTI) among children and adolescents in Ile-Ife

This study was carried out in order to determine the incidence of urinary tract infection in children and adolescents, identify the uro-pathogens responsible for the infection and study the antibiotic sensitivity patterns of the uro-pathogens. Clean voided mid-stream urine samples were collected in sterile universal bottles from 301 children and adolescents between the ages of 5 and 18 years at the Obafemi Awolowo University Teaching Hospital complex (OAUTHC) Ile-Ife, Nigeria from December 2005 - July 2006. Culture plates with bacteria counts greater than or equal to 1×10^5 cfu-ml⁻¹ were taken as positive, thus indicative of Urinary Tract Infection (UTI). The bacteria isolates were identified based on colony morphology characteristics, Gram stain reaction and biochemical tests using API 20E kits. The identified bacteria were then tested in vitro with standard antibiotics disc to determine their antibiotics sensitivity patterns. The result of this study shows that 36 (11.96%) of the 301 patients studied had UTI. Of the 124 females examined, 28 (22.4%) had positive urine culture while 8 (4.56%) of the 177 males had significant bacteriuria. A total of 36 bacterial isolates were obtained. *Escherichia coli* constituted the predominant organism and was responsible for (52.77%) of the cases of UTI. This was followed by *Klebsiella* sp. (25%), *Proteus mirabilis* (13.89%), *Streptococcus faecalis* (5.56%) and *Pseudomonas aeruginosa* (2.78%). The antibiotics sensitivity test revealed a high level of resistance to cotrimoxazole, amoxicillin and colistin as more than 60% of the isolates were resistance to these. This study highlights the presence of multi-resistance *P. aeruginosa* and poor compliance of the pathogens in vitro to antibiotics commonly used in treating UTI. It is therefore suggested that appropriate antimicrobials be administered to reduce the risk of multiply resistance organisms developing and avert ineffectiveness of antibiotics. Prompt therapeutic intervention is also essential to prevent cases of asymptomatic UTI from becoming symptomatic with resultant damage.

Keywords: UTI, uro-pathogens, antibiotic sensitivity.