

A Study Of Urinary Tract Infection In Diabetes Mellitus

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Abstract

background:

The world today is witnessing an epidemic of diabetes mellitus globally and nationally¹. Diabetes with its complication has become the most important contemporary and challenging health problem. Urinary tract is most common site for infection in diabetes and most infections are relatively asymptomatic^{2,3}. Diabetes has a long term effect of the genitourinary system, predisposing to bacterial urinary tract infection. The use of chemotherapeutic and antibiotics have revolutionised and simplified the treatment of UTI

Aim:

To determine the clinical characteristics, causative organisms and antimicrobial susceptibility of causative organisms in urinary tract infection in diabetes mellitus.

Methods:

100 patients, both male and female with diabetes mellitus i.e. fasting blood glucose>126mg% and post prandial blood glucose>180mg/dl and proved urinary tract infection by urine microscopy were included in the study. Bacterial colonies were identified by standard bacteriological and biochemical procedures and further processed for antibiotic sensitivity under standard lab conditions.

Results:

Out of 100 patients 55 were female and 45 male. 56% of patients presented with fever followed by dysuria 46% pain abdomen 46% vomiting 36% oedema 11% increased frequency seen in 1% haematuria in 13%. ESR was raised in 99 patients. E.coli is the most common organism isolated i.e. 71% followed by Klebsiella 16% Pseudomonas and Proteus 4% each. In our study Imipenem, Meropenem and Colistin were found to be most sensitive to all the

organisms isolated.

Conclusion:

In symptomatic patients with UTI in diabetics fever is the most characteristic clinical symptom followed by dysuria. Bacteriological study of organisms isolated from cases of UTI in diabetics showed that E.coli is the most common organism encountered. Imipenem, Meropenem and Colistin were found to be drug of choice in most hospitalised patients with UTI in diabetics.

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