

Introduction:

Urinary tract infections (UTIs) are a major problem among the diabetic patients with a higher risk of acquiring the infection than their non-diabetic counterparts. This may be due to both host and local risk factors in diabetic patients. The predisposing factors for UTIs in diabetic patients includes invasion of the urinary tract with different microorganisms, glycosuria and impaired functioning of the granulocytes. UTIs in diabetes mellitus can lead to cystitis, pyelonephritis, impaired functioning of the leucocytes, recurrent vaginitis, emphysematous complications and renal abscesses when there is poor glycemic control.

Objective:

The study was conducted to establish the uropathogens causing UTI among diabetic patients attending the diabetic clinic at Jinja Regional Referral Hospital.

Methodology:

A cross sectional study was conducted from May to August 2015, where midstream urine samples from a total of 210 consented diabetic patients were obtained for analysis. The urine samples were transported to the laboratory.

CONCLUSION:

All the urine samples were subjected to routine urinalysis to determine their suitability for culture test. One hundred and fifty nine (159) urine samples had more than 10 pus cells per high power field of a light microscope (x 40 objective) and were cultured on blood agar, MacConkey and CLED. Forty one (41) urine samples were not cultured as they did not qualify for it. Growths were inspected after 18 – 24 hours of incubation and colony counts performed. Cultures with significant growth were identified using biochemical identification techniques. The data were entered in excel and exported to STATA version 11. Chi square test was used to show associations between two categorical variables and results were presented with 95% confidential interval was used to report the mean. Results: The mean age of the participants was 51 years with a 95% confidence interval of 25 – 77 years. Out of the 159 samples 35/159 (22.01%) showed significant bacterial growth and of the isolates Staphylococcus aureus, (18/35, 51.43%) was the commonest, (12/35, 34.3%) were E. coli, (3/35, 8.6%) were Klebsiella spp and the rest were either Citrobacter or Moganella morgani (1/35; 2.86% respectively). Significant bacteria was associated with hyperglycaemia (Pearson [chi] 2; 74.6 p value 0.0001) and symptoms such as fever, painful urination (dysuria), lower abdominal pain and hematuria (Pearson chi [1], 3.95 p value 0.047)

RECOMMENDATION:

This study highlighted that the occurrence of the uropathogens causing UTIs are high especially among the diabetic women. This calls for periodic screening of diabetic patients both in symptomatic and

asymptomatic patients.