PREVALENCE OF ASYMPTOMATIC BACTERIURIA IN DIABETIC ADULT PATIENTS ATTENDING A TERTIARY HOSPITAL IN WESTERN REGION, NEPAL: A PROSPECTIVE CROSS-SECTIONAL STUDY

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Background: Urinary Tract Infection is a well-known complication of Diabetes Mellitus (DM). Many studies have delineated an increased prevalence of Asymptomatic Bacteriuria (ABU) in DM patients whereas to the same degree many other studies have come to naught showing insignificant association. There is dearth of data on prevalence of ABU in wider age group of diabetic patients in Nepalese population. Hence, this study was drafted to evaluate the prevalence of ABU among wider age group diabetic adult patients, assess the associated risk factors and identification of bacteriological profile along with its antibiotic sensitivity pattern. Methods: Clinical, biochemical and microbiological data were collected from 116 diabetic patients. A clean catch technique was used for collecting mid-stream urine. Data were entered in SPSS and analysed using Independent sample t test, Chi square test, Fisher exact test and binary logistic regression test. Results: The prevalence of ABU in diabetic adults was 10.3%. Responsible pathogens were Escherichia coli (75%) superseded by Klebsiella pneumonia (16.7%) and Staphylococcus aureus (8.3%). Escherichia coli were sensitive to Nitrofurantoin and Imipenem meanwhile Klebsiella pneumoniae were sensitive to Fluroquinolones, Co-trimoxazole and Imipenem. Significant association of ABU was noted with duration of DM being 6-10 years (p 0.05), Fasting Blood Sugar level (p 0.05) and poor glycaemic control (p 0.05). Conclusions: In diabetic adult patients, ABU is preponderant and linked mainly with duration of DM and poor glycaemic control. Hence, Screening for ABU is imperative in a diabetic patient if the above mentioned risk factors are present.