

Glycemic control and prevalence of urinary tract infections among diabetic patients

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Abstract

Urinary tract infections (UTIs) occur more frequently in diabetic than in non diabetic patients and have been seen to be the primary renal complication that causes diabetic nephropathy. This study was to investigate the association between glycemic control and the prevalence of UTIs in clinically diagnosed patients with diabetes mellitus. One hundred and twenty five diabetic patients comprising 70 (56.0%) females and 55 (44.0%) males attending the Buea and Limbe Regional Hospital Diabetic Clinics, South West Region, Cameroon were studied. Venous blood for glycosylated hemoglobin measurement and midstream urine samples were collected from the study participants. The midstream urine samples were examined macroscopically and microscopically. They were also tested for proteins, WBCs, RBCs and Ketones using a dipstick. Culture was done and isolates were tested against commonly used antibiotics and antifungals. Urinary tract infections had a prevalence of 41.6%. Isolates showed high resistance to frequently used antibiotics e.g ciprofloxacin (61.3%) and ceftriaxone (70.1%) to cheaper antibiotics such as gentamicin (11.3%) and nitrofurantoin (13.4%). Glycemic control was grouped into 3 major groups; good, fair and poor control. Diabetic patients with poor glycemic control were observed to be associated with urinary tract infections, ($P=0.001$). Glycemic control and cultures should be performed regularly to isolate and treat UTIs in diabetic patients.

Biography

Ajime Tom Tanjeko has completed his M.Sc. in Chemical Pathology [Clinical Biochemistry] at the age of 25 years from the University of Buea, Cameroon. He is presently a post graduate research assistant at the faculty of health sciences of the University of Buea. Since he defended his Master's thesis in January this year, he has published one book and one scientific article.