



Prevention

A GENERAL REPORT OF THE PREVALENCE AND CORRELATES OF PERIPHERAL ARTERIAL DISEASE IN SOUTHWESTERN UGANDA

Poster Contributions

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Background: Chronic non-communicable diseases (NCDs) are increasingly recognized as a public health priority in developing countries, with the greatest regional increase in NCD deaths over the next decade predicted in Sub-Saharan Africa. Peripheral arterial disease (PAD) can be diagnosed with low-cost tools and is associated with significant morbidity and mortality. In resource-rich settings, diabetes mellitus and black race have been associated with premature atherosclerosis, however data from resource-limited countries are limited. We performed a study to determine the prevalence and correlates of PAD among patients with diabetes at a referral hospital in southwestern Uganda.

Methods: We consecutively enrolled diabetic patients aged 40 years or greater presenting to the outpatient clinic. We collected blood for fasting lipid profile, HIV serology, and hemoglobin A1c, measured blood pressure and ankle brachial index, and administered the Edinburgh Claudication Questionnaire (ECQ). We also surveyed patients on PAD risk factors. We fit logistic regression models to test for correlates of PAD.

Results: Of the 307 that met inclusion criteria, the median age was 56 years (IQR 49-64) and 64.5% were female. The prevalence of PAD (ABI of < 0.9) was 24.1%, among whom 43.2% reported claudication by ECQ. Correlates of PAD included hypertension (OR=2.2; 95%CI=1.1-4.7, p=0.029) and glibenclamide use (OR=3.4, 95% CI=1.6-7.4, p=0.001).

Conclusion: PAD is common among diabetic outpatients in southwestern Uganda, and is associated with hypertension. Because ABI measurement is low-cost and easy to perform, and treatment of PAD improves cardiovascular outcomes, screening for PAD should be prioritized among diabetics in the region.