Peripheral arterial disease [PAD] is usually due to atherosclerosis obliterans of the arteries of the lower limbs. It has a spectrum of manifestations from the sub-clinical asymptomatic disease to symptomatic disease with classic intermittent claudication. Most patients with PAD has asymptomatic disease. All patients with PAD are at increased risk of morbidity and mortality from major cardiovascular events such as myocardial infarction and stroke.

Prevalence of PAD varies from region to region. In Nigeria, data on prevalence of PAD is very scanty. This study therefore aims to determine the prevalence of PAD in adult Nigerian hypertensive patients.

Between August to December 2004, two hundred and fifty hypertensive patients, (one hundred and fifty with only hypertension, and one hundred with hypertension and co-existent diabetes mellitus) were screened for PAD. They were aged 18 years and above, with a mean peak age of 58.94 years. 106 [42.5%] were males while 144 [57.6%] were females. Eighty age and sex-matched controls were also screened, and they had a mean age of 58.8 years. Rose intermittent claudication questionnaire was interviewer-administered. Physical examination, and Doppler studies were carried out on each patient. Colometric estimation of total cholesterol, HDL-cholesterol, LDL-cholesterol, and triglycerides were done. Fasting blood glucose estimation was also done.
Results show that PAD has an overall prevalence of 24.8% in the study group. Most patients were asymptomatic and the ratio of symptomatic to asymptomatic disease was found to be 1:3.4. Patients with concurrent diabetes had relatively higher prevalence rate [26%] compared to patients with only hypertension [24%]. Also lipid derangement was higher in patients with PAD than in those without PAD.

Prevalence was much higher in patients above 55 years of age [30.7%] than in patients below 55 years of age [15.5%]. Highest prevalence rate was detected using the ankle-brachial index [ABI] (24.8%), followed by physical examination (10%), and lastly by anamnesis (5.6%).

It is concluded that PAD appears to be common in our hypertensive patients than was previously believed, with majority of the patients being asymptomatic. Lipid derangement was also higher in patients with PAD.