

Ankle Brachial Index Screening for Peripheral Arterial Disease in Asymptomatic Diabetic Patients

Alaa El Deen Dawood¹, Mahmoud S. El-Desoky¹, Heba A. El-Malky^{1*}, Mai A. Kamel¹

ABSTRACT

BACKGROUND:

Peripheral arterial disease (PAD) is a common macrovascular complication in diabetic patients related to atherosclerosis. Early diagnosis of PAD by Ankle brachial index (ABI) is highly critical as this disease results in significant morbidity and mortality.

OBJECTIVES:

To screen for PAD in asymptomatic diabetic patients by using ABI, determining its prevalence and associated risk factors.

METHODS:

This is a cross-sectional study conducted on 309 diabetic patients, all were asymptomatic, in internal medicine Department, Menoufia University Hospitals in the period between December 2018 and December 2020. Full history and biochemical profiles were obtained and ABI indices were measured to evaluate for PAD.

RESULTS:

The prevalence of PAD in this study was **36.2%**. Advancing age, sedentary life, long duration of Diabetes, smoking, poor glycemic control and dyslipidemia were identified as risk factors for PAD (**p value <0.001**) however, hypertension and body mass index were not significant among studied patients (**p value 0.594 and 0.733 respectively**).

CONCLUSION:

PAD has a high prevalence in asymptomatic diabetic individuals. It is associated with multiple risk factors such as Smoking, dyslipidemia, advancing age, atherosclerosis and prolonged uncontrolled hyperglycemia. Diabetic patients should be routinely examined by ABI to improve the outcome.

KEYWORDS:

Peripheral Arterial Disease, Diabetes, Ankle brachial index.

Department of internal medicine, Faculty of Medicine, Menoufia University, Egypt.

*Corresponding Author: elmalkyheba549@gmail.com