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**Original article:**

**Detection of peripheral vascular disease in patients with type-2 DM using Ankle Brachial Index (ABI)**

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**Abstract:**

**Introduction:** Peripheral arterial disease is defined as a clinical disorder in which there is stenosis or occlusion in the arteries of the limbs. Atherosclerosis is a leading cause of Peripheral arterial disease (PAD). There is increased risk of PAD in cigarette smokers and in persons with diabetes mellitus, hypercholesterolemia and hypertension.

**Methodology:** The study was conducted among 40 patients of type 2 diabetes mellitus to detect peripheral vascular disease using Ankle Brachial Index (ABI). In the study various factors were correlated with occurrence of PVDs.

**Results:** Out of total 40 patients 14 (35%) were female and 26 (65%) were male. The above table indicate age and sex wise distribution of the patient. There is no significant difference in age and sex wise distribution of the cases (p>0.05) . The mean age in male was 48.35 years and in female 50.86 years. However, this difference is not significant (p>0.05). Mean BMI in male was 27.50 and in female 26.86 years. However, this difference is not significant (p>0.05). Number of cases with abnormal ABI were 5 (12.5%), among them 3 were male and 2 were female. Thus total 5 cases had PVD based on ABI method. In male 3 cases were there and female 2 were there. Among cases with PVD, 54.3% were in 51 to 60 year of age and 40% were in 41-50 year of age. So age wise distribution was not significantly difference. On application chi square test, it was not significant (p>0.05), thus age was not associated with PVD in DM cases.

**Conclusion:** Among the type 2 diabetes mellitus cases using Ankle Brachial Pressure Index (ABI) method prevalence of Peripheral Vascular Disease (PVD) was 12.5%.

**Keywords:** Ankle Brachial Pressure Index , Peripheral arterial disease , atherosclerosis