

A Study on the Prevalance of Peripheral Vascular Disease in Diabetic Foot Ulcer Patients

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Abstract:

INTRODUCTION :

Prevalance of peripheral vascular disease in diabetic patients is difficult to diagnose. Patients with both entities are likely to develop ischemic non healing ulcers in lowerlimbs which may progress to gangrene and significant morbidity and mortality. Perception of muscle pain in the lowerlimb on exercise which is the most common symptom of PVD is blunted in diabetic patients due to peripheral neuropathy. And this makes it difficult to treat PVD in diabetic patients due to late presentation.

AIMS AND OBJECTIVES

To evaluate the occurrence of PVD in diabetic foot ulcer patients.

Ankle Brachial Index measurement in diabetic patients attending surgery outpatient department for foot ulcer and associated complaints could help early detection of PVD thus making the initiation of early therapy and reducing the risk of critical limb ischemia and limb loss possible.

MATERIALS AND METHODS

A cross sectional study in 100 patients in our college hospital. ABI<0.9 taken as cut off to identify the patient as having PVD.

RESULTS

Out of 100 diabetics 12 patients found to have PVD with ABI<0.9. All of them were diabetic for more than 6 years. Early detection of PVD in diabetics thus allows early treatment in those patients even before the emergence of complications.

Keywords Ankle brachial index, Cellulitis, Diabetic, Peripheral vascular disease, Ulcer,

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TABLE 1 SEX PREVALANCE

SEX	ABI<0.9	ABI>=0.9	FISHER EXACT PROBABILITY	P VALUE
FEMALE	4	29	0.001	1.00
MALE	8	59		

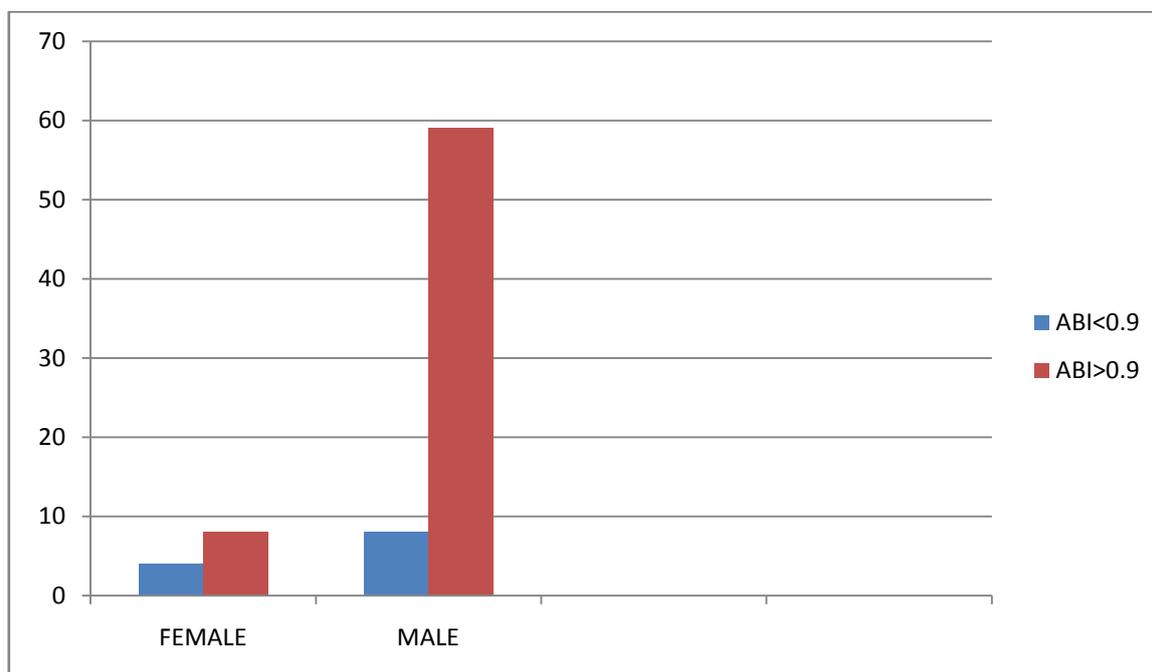


Fig 1 : sex prevalence

TABLE 2 INSULIN AND ABI

ON INSULIN	ABI<0.9	ABI>=9	FISHER EXACT PROBABILITY	P VALUE
NO	6	71	5.613	0.028
YES	6	17		

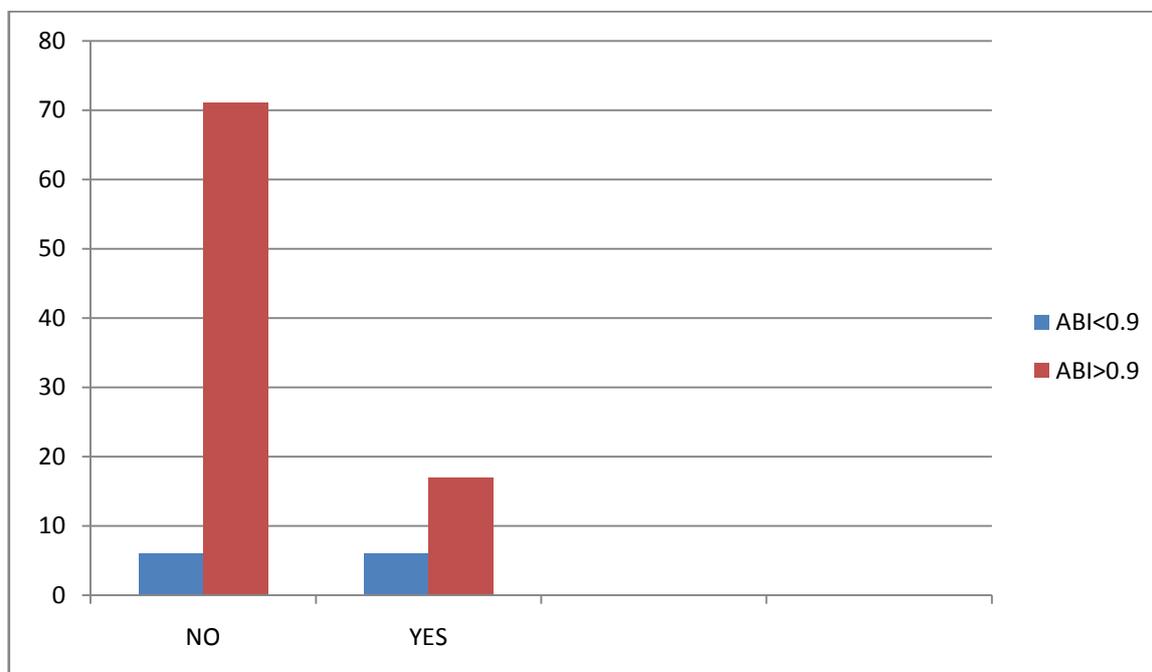


Fig 2 Insulin and ABI

TABLE 3 TRAUMA AND ABI

TRAUMA	ABI<0.9	ABI>9	FISHER EXACTPROBABILITY	P VALUE
NO	1	32	3.753	0.097
YES	11	56		

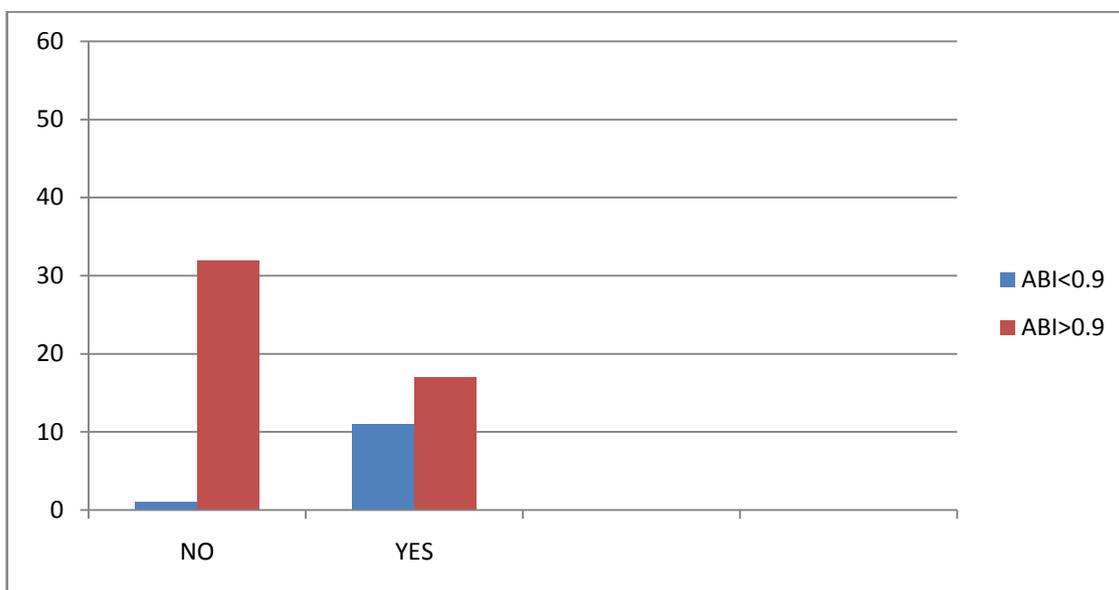


FIG 3 TRAUMA AND ABI

TABLE 4 CELLULITIS AND ABI

CELLULITIS	ABI<0.9	ABI>9	FISHER EXACT PROBABILITY	P VALUE
NO	10	77	0.162	0.653
YES	2	11		

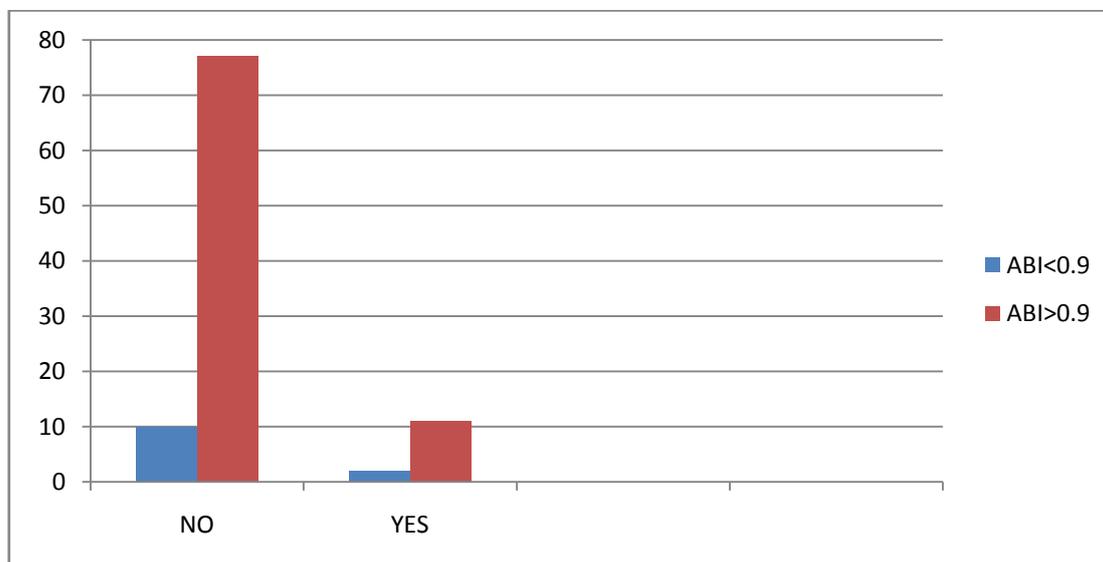


Fig 4 CELLULITIS AND ABI

V. Discussion

In this study 6 were male,33 were female.23 were on insulin,60 on OHA,17 were not on any drugs.

65 had no co morbid conditions.35 had hypertension,2 had bronchial asthma,2 had CAD.Right foot was involved in 54 and left foot in 46 patients. History of trauma in 67 patients. 13 presented with cellulitis and 52 had active discharge from foot ulcers. The youngest in the study was 29 and the oldest was 81.duration of diabetes ranged from 2 weeks to 20 years.ABI was found to be 1 in majority of patients.0.9 in 5 patients and 0.8 in 12 patients. Among the patients found to have peripheral vascular disease 12 had duration of diabetes >=6 years and about half of the patients were on treatmentwith insulin for uncontrolled diabetes and rest were on OHA.

VI. Conclusion

The prevalence of peripheral vascular disease in this cross sectional study conducted in 100 patients with diabetes and foot ulcers who attended our surgical OPD is found to be 12%. Increased duration of diabetes with uncontrolled glycemic status has a significant role in the development of Peripheral vascular disease and its complications.

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