

# Digital Biothesiometer with Vascular Doppler™ VIBRODOP™



India's first innovative design that has combined Digital Biothesiometer for the detection of loss of vibration perception and a Vascular Doppler for the measurement of Ankle Brachial Index (ABI). Computer connectivity is a built-in facility and reports are generated by the software supplied.

The Ankle Brachial Index (ABI) is a measure of the severity of atherosclerosis in the legs but is also an independent indicator of the risk of subsequent atherothrombotic events elsewhere in the vascular system. The ABI may be used as a risk marker both in the general population free of clinical CVD and in patients with established CVD.

Vibration Perception Threshold (VPT) has been shown to be strongly associated with foot ulceration. VPT determination by using a Digital Biothesiometer has been used to identify peripheral sensory neuropathy and subjects at risk of foot. Digital Biothesiometer helps us quantitate the threshold and monitor progressive changes or trends on following up testing.

Sensory neuropathy increases the risk of foot ulcerations by seven folds and peripheral arterial disease (PAD) by three folds in people with diabetes. Peripheral neuropathy is the major causal factors in the development of foot ulcerations among diabetic subjects.

Early detection helps better prevention. Prevention is better than no cure. 50% of all non-traumatic amputations occur in diabetes who is a high risk group.

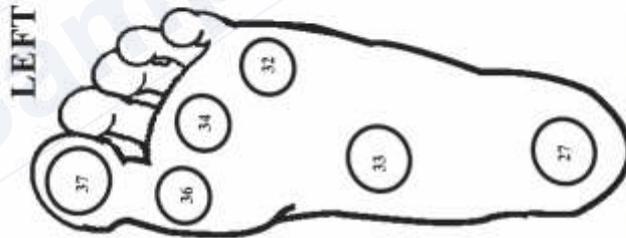
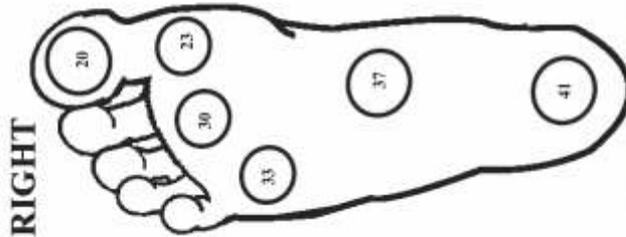
## FEATURES:

- ◆ Doppler (C.W) with 8MHz Uni-Directional probe
- ◆ Ankle Brachial Index
- ◆ Doppler Velocity Waveform with ABI Index
- ◆ 0 to 50 Volts Vibration linear output
- ◆ Computer USB connectivity enabled
- ◆ Software for data transfer, storage and patient report
- ◆ Software supports all formats of Windows (Xp, Win 7, Win8 & Win10) OS
- ◆ Standards matching International standards
- ◆ Simultaneous ABI and VPT measurement when operated manually.

ID : 106320121140  
Name : Mr Manikandan Yerranigan  
Age : 32 Yrs

Gender : MALE  
Date : 30/Mar/2012  
Referral : Dr.Hari

**BIOthesiometry Study**



AVERAGE : **31** Severe Loss of Vibration Perception\*\*  
(in Volts)

Beyond 25 Volts is 7 times more prone to ulceration in a diabetic foot than a normal foot. It is increasing to 23 times beyond 42 Volts. (Higher the threshold, higher the risk).

REMARKS :

**33** Severe Loss of Vibration Perception\*\*

NR - Not Recorded

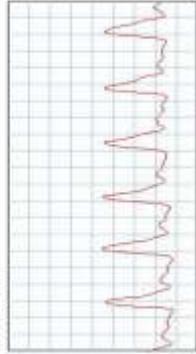
CONSULTANT : Dr.Panneerselvam  
SPECIALISATION : Diabetologist

ID : 091  
Name : Mr Manikandan  
Age : 55 Yrs

Gender : MALE  
Date : 31/Dec/2014  
Referral : Dr.Srinanth

**Ankle Brachial Index Doppler Report**

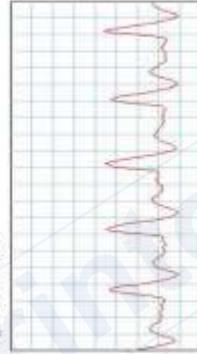
Right Brachial



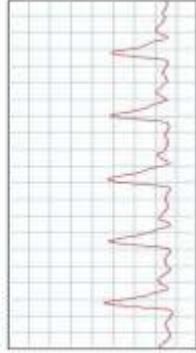
Right Posterior Tibial



Right Dorsalis Pedis



Left Brachial



Left Posterior Tibial



Left Dorsalis Pedis



Position	Brachial	PT	DP	ABI
Right	124	156	154	1.26
Left	124	143	143	1.15

TASC II Guideline for ABI

0.91 to 1.40 - NORMAL 0.71 to 0.90 - MILD PAD  
0.41 to 0.70 - MODERATE PAD < 0.40 - SEVERE PAD  
> 1.40 - INCOMPRESSIBLE (CALCIFIED) ARTERY

Interpretations :  
Normal ABI study

Consultant: Dr.Panneerselvam  
Specialisation: Diabetologist