**Aim:** The aim of this study was to compare ankle brachial indices (ABPI) with pedal waveforms utilising the continuous wave Doppler in a population with diabetes mellitus.

**Methods:** A prospective study design was employed to investigate the ABPI in a cohort of 49 patients with Type 2 diabetes mellitus. ABPI assessment was completed using a portable handheld Doppler and ankle pressures of <0.9 were taken as suggestive of peripheral arterial disease (PAD). Arterial spectral waveforms in each foot were also recorded and compared to the ABPI readings. **Results:** Inconsistencies were identified between ABPIs and waveform interpretations in the study population. Approximately 35% of recruited subjects had inconsistencies between their ABPI result and waveform interpretation in their right or left foot. **Conclusions:** Both ABPIs and Doppler waveforms should be used in the assessment of patients with diabetes in order to screen for PAD. When these do not concur, further evaluation should be performed. This would ensure an accurate assessment of PAD and would significantly reduce the proportion of falsely identified patients as having no peripheral arterial disease and subsequently would allow initiation of appropriate secondary risk factor control measures. Current recommendations about physiological testing of peripheral perfusion in diabetes should be re-evaluated and consideration should be given to include spectral waveforms as part of the assessment.