Top Ten Things To Know
ABI and CV Events

1. It has been estimated that approximately 8 million persons in the United States are afflicted with peripheral artery disease (PAD).\(^1\)

2. The ankle-brachial index (ABI) has been shown to be an effective tool to diagnose atherosclerosis and other vascular events, but what ABI threshold should be used to diagnose PAD remains unclear.\(^2\)

3. The purpose of this paper is to
   - Provide recommendations for a standardized method to determine the ABI.
   - Provide guidance on the interpretation of the ABI in the clinical setting.
   - Propose standards for reporting ABI data in the scientific literature.
   - Delineate methodological issues requiring further research.

4. An ABI \(\leq 0.90\) should be considered as the threshold for confirming the diagnosis of lower extremity PAD (Class I, LOE A).

5. An ABI decrease of more than 0.15 over time can be effective to detect significant PAD progression (Class IIa, LOE B).

6. A high ABI value (>1.40) was associated with stiff arterial walls and possibly medial artery calcification.

7. In assessing coronary artery disease and stroke independently, a high ABI was shown to be more strongly associated with stroke than a low ABI.

8. The results of the study showed that patients free of cardiovascular disease (CVD) at baseline with both a low and a high ABI were associated with elevated CVD risk, independent of standard and novel risk factors, and independent of other measures of subclinical CVD.

9. In determining ABI, the Doppler method should be used to measure the systolic blood pressure in each arm and each ankle (Class I, LOE A).

10. Future research should assess the cost effectiveness of ABI since it is an inexpensive and simple test to conduct.


---


© 2012, American Heart Association. All rights reserved.