The usefulness of ankle brachial index (ABI) and cardio-ankle vascular index (CAVI) in subclinical atherosclerosis

Atherosclerosis, a precursor of cardiovascular disease (CVD), is a systemic disease that affects coronary, cerebral, and lower-extremity arteries. For many patients the first clinical manifestation is a potentially catastrophic event, such as stroke, myocardial infarction, or sudden death. Detection subclinical atherosclerosis is important to improve current scoring system. Measurement carotid intima-media thickness (cIMT) and ankle brachial index (ABI) are well studies markers for atherosclerosis. Unlike cIMT, a marker of early atherosclerosis development, ABI often regard as a marker in patients who already have high estimated vascular risk (e.g. smokers or diabetic patients). CAVI is a newly marker representing the stiffness of the entire arterial segments from the aorta to the ankle. Previous studies showed CAVI is a more reliable marker than ABI for atherosclerotic progression. Further studies focusing CVAI is required to improve vascular risk stratification.

References


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