Ankle-brachial index (ABI) associated with severity coronary atherosclerosis in patients with coronary artery disease

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Coronary artery disease (CAD) is a major cause of mortality and morbidity worldwide. Furthermore, the ankle-brachial index (ABI) has been shown to predict mortality and adverse cardiovascular events. The aim of the present study was to investigate ABI associated with severity of coronary atherosclerosis assessed by Gensini Score in patients with coronary artery disease (CAD). We prospectively enrolled 66 new diagnosed CAD patients (65% male; mean age, 65.9±12 years), who underwent both ABI and coronary artery angiography consecutively. Characteristics of patients in this study including familial history, medical history and atherosclerotic risk factors such as diabetes mellitus, hypertension, hyperlipidemia, and smoking were obtained using a standard questionnaire. The most prevalent risk factor was hypertension (70%). The Gensini Score and hip circumference were significantly associated with ABI (r=-0.258, P=0.037; r=0.326, P=0.008, respectively). There was however no correlation between ABI and waist circumference (r=0.163, P=0.190) or ABI and body mass index (BMI) (r=-0.037, P=0.770). ABI is associated with severity coronary atherosclerosis and hip circumference in CAD patients. The findings of this research suggested that ABI could be a useful method in assessing the atherosclerotic risk factors. However, further studies in the large sample sizes should be conducted in order to confirm the data. We prospectively enrolled 95 patients (66% male; mean age, 50±16 years) who underwent both CCTA and CAVI consecutively.

Biography
Suphawadee Phababpha has earned her PhD degree in 2013 from Khon Kaen University, Thailand. She is currently a Lecturer at Chulabhorn International College of Medicine, Thammasat University, Rangsit Campus, as well as a key Member of Physiological Society of Thailand.
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