The value of ankle-brachial index in the patients above 40 years old with Type 2 Diabetes Mellitus on the Diagnosis of Peripheral Artery Disease and the Association between Peripheral Artery Disease and Chronic Diabetes complications.

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Objectives:
Peripheral Artery Disease (PAD); is a chronic occlusive disease in lower extremities. PAD is an important sign of atherosclerosis, and an important predictor of mortality and morbidity during the cerebrovascular and cardiovascular diseases. Since the cardiovascular diseases are the most important cause of death in type 2 DM patients, diagnosing the mortality and morbidity predictor PAD in the early period is very important. The ankle-brachial index is an easy and cheap method to diagnose PAD. In this study, we aim to identify PAD prevalence by measuring ankle-arm index in type 2 DM patients, by compare with arterial doppler ultrasonography findings of lower extremity and to identify the association between chronic complications of type 2 DM and PAD.

Methods:
111 type 2 DM patients above 40 years old were included in our study.

Results:
The PAD prevalence was found to be 19.8%. Dorsalis pedis artery palpation was found to be an important physical exam finding to diagnose PAD. Instead of ABI calculation in the AHA and TASC2 guidelines, there was a stronger correlation between PAD prevalence and the method of dividing the lower systolic blood pressure of dorsalis pedis or tibialis posterior artery by the higher systolic blood pressure of brachial artery. A significant association was found between PAD diagnosed with lower extremity arterial doppler and age, DM duration, body mass index, coronary artery disease, cerebrovascular disease, GFR, albuminuria, uric acid and homocystein levels, insulin resistance, diabetic retinopathy and vibration test.

Conclusions:
The ankle-brachial index was found to be a reliable method to diagnose PAD.

References: