ABI WITH EXERCISE ULTRASOUND

OVERVIEW: The ABI test is used to document the presence or absence of peripheral arterial disease (PAD), and can be performed every year to assess whether PAD is getting worse if found to exist in an earlier exam. Blood pressure measurements are taken at the arms and legs using a pencil-shaped ultrasound device called a Doppler.

PREPARATION: There is no preparation for this test. This test is done by measuring blood pressure at the ankle and in the arm after exercise as explained more fully below. Measurements are usually repeated at both sites after 3 minutes of heel/toe raises.

The ankle-brachial index (ABI) result is used to predict the severity of PAD. A slight drop in the patient's ABI with exercise means that they probably have PAD. This drop may be important because PAD can be linked to a higher risk of heart attack or stroke.

The patient will be asked to remove their clothing around their legs, shoes, and socks. A sonographer will wrap a blood pressure cuff around the patient's arms and legs at various places including the ankles. Because pulses in the legs and ankles are inaudible through a stethoscope, the Doppler is used. The sonographer will put ultrasound gel on the patient's pulse points and use the Doppler to take the blood pressure from each point. The Doppler will make a loud noise as the sonographer finds the patient's pulse, but this is normal. The cuffs will inflate until the pulse can no longer be heard through the Doppler and then deflated. The patient should not experience any pain, but they may feel some discomfort around the thickest part of their legs such as the calves and upper thighs.

The most common reasons for this ultrasound are:

- To help diagnose peripheral arterial disease (PAD).
- It is also used to see how well a medical treatment is working (such as an exercise program, angioplasty, or surgery).

THIS ULTRASOUND WILL TAKE ABOUT 45-50 MINUTES AND THE REPORT WILL BE BACK TO YOUR ORDERING PHYSICIAN WITHIN 24-48 HOURS.