

Ankle-brachial index

Exam Overview - This test is done by measuring blood pressure at the ankle and in the arm while a person is at rest. Some people also do an exercise test. In this case, the blood pressure measurements are repeated at both sites after a few minutes of walking on a treadmill. The ankle-brachial index (ABI) result is used to predict the severity of peripheral arterial disease (PAD). A slight drop in your ABI with exercise means that you probably have PAD. This drop may be important, because PAD can be linked to a higher risk of heart attack or stroke.

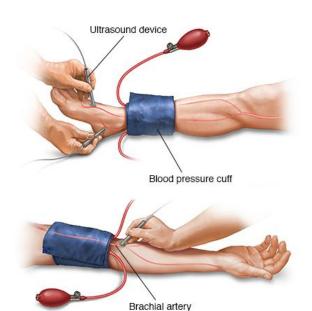
Why It Is Done -

This test is done to check for peripheral arterial disease of the legs. It is also used to see how well a treatment is working (such as medical treatment, an exercise program, <u>angioplasty</u>, or surgery).

This test might be done to check your risk of <u>heart</u> <u>attack</u> and <u>stroke</u>. The results can help you and your doctor make decisions about how to lower your risk.

Results - The ABI result can help diagnose peripheral arterial disease (PAD). A lower ABI means you might have PAD. A slight drop in the ABI with exercise, even if you have a normal ABI at rest, means that you probably have PAD.

Normal - A normal resting ankle-brachial index is 1.0 to 1.4. This means that your blood pressure at your ankle is the same or greater than the pressure at your arm, and suggests that you do not have significant narrowing or blockage of <u>blood</u> flow.



Abnormal - Abnormal values for the resting ankle-brachial index are 0.9 or lower and 1.40 or higher. If the ABI is 0.91 to 1.00, it is considered borderline abnormal.

Abnormal values might mean you have a higher chance of having narrowed <u>arteries</u> in other parts of your body. This can increase your risk of a <u>heart attack</u> or <u>stroke</u>.

What To Think About - An abnormal ABI test result may require more testing to determine the location and severity of PAD that might be present.

You may experience <u>leg pain</u> during the treadmill portion of the test if you have peripheral arterial disease (PAD).

How you prepare - Generally, you won't need to follow any special instructions before your appointment to have an ankle-brachial index test performed. You may want to wear loose, comfortable clothing that allows the technician performing your ankle-brachial index test to easily place a blood pressure cuff on your ankle and upper arm.

Risks = For most people, there are no physical risks involved in an ankle-brachial index test. You may feel some discomfort when the blood pressure cuffs inflate on your arm and ankle, but this discomfort is temporary and should stop when the air is released from the cuff.

If you have severe leg or arm pain, your doctor may not recommend an ankle-brachial index test. Instead of an ankle-brachial index test, your doctor may recommend a different imaging test of the arteries in your legs.