

# Ankle-Brachial Index (ABI)

## General Information

The ankle-brachial index, or ABI, is a test that tells how well blood is flowing through the arteries of your leg. Hardening of the arteries can cause a narrowing or blockage of the leg arteries. This is also known as peripheral arterial disease (PAD).

Symptoms of PAD may include a discomfort in muscles of the calves, thighs or buttocks that comes on with walking (claudication) and goes away after a few minutes of rest.

More severe cases of poor circulation may even lead to amputation (removal of a leg or foot) and death because of the lack of circulation through the legs. Sometimes, PAD can decrease leg blood flow without causing any symptoms at all. The ABI is the safest and most reliable test to find PAD.

## During the ABI Procedure

- You will take off your socks and shoes, roll your sleeves up to above your elbow, and lie down. If your sleeves are tight, you may be asked to take off your shirt.
- After you have been lying down for 10 minutes, a member of your health care team will put blood pressure cuffs on both of your arms and ankles.
- The health care team member will find your pulse at your elbows and ankles. Gel will be applied to the skin above these pulses.

A doppler probe (the size of a large pen) will be placed in the gel at these pulses. The health care team member will listen to the blood flow in your arteries with the doppler.

- The blood pressure cuffs will be inflated one at a time. Each cuff will then be deflated to get the measurement for that arm or leg.
- The entire procedure takes about 20 to 30 minutes.
- Your primary health care provider will give you the results of your test.

## Benefits of the ABI Measurement

The ABI will only help your health care provider confirm PAD. It does not cure your circulation problems. The test results give your health care provider information about the flow of blood through your arteries. Together you and your health care provider can decide how to improve your circulation problems.

If you have decreased blood flow through your arteries, your health care provider can suggest things you can do to improve your circulation, such as quitting smoking or increasing your exercise.

You may need to have a non-surgical or surgical procedure to improve your circulation. Your health care provider will give you more information about your condition and discuss your options for treatment.