Arterial Blood Flow Studies of the Leg

What does this test measure?
The blood flow study for the legs, sometimes called a segmented Doppler study, measures the blood pressures and pulses in your legs and ankles. The pressure in your legs will be compared with the pressure in your arms. Normally the blood pressure in the arm is the same as in the leg. If they are not the same, you may have a blockage with the blood flow (circulation) in your legs.

How is the test done?
• Your blood pressure will be taken in both arms.
• Blood pressures will be taken at several difference places along your legs and ankles.
• A tracing of the strength of the pulses in your legs and feet will be made with each blood pressure.

![Graph showing blood pressure levels](image)

• The test takes 20 -30 minutes and is usually done the vascular laboratory. You do not need to do anything to prepare for it. You will be awake and lying down during the test.

**Will this test be painful?**

You will feel some tightness as the blood pressure cuff is inflated. You may have discomfort during the test if you already have pain in your legs.

**Exercise during the test**

Your doctor may want to know what the blood pressures are in your legs during light exercise. A blood flow problem may get worse when you exercise because an exercising muscle needs increased blood flow. If exercise is done as part of the test, you will be asked to walk on a treadmill or in the hallway for no longer than 5 minutes. After you walk, your leg blood pressures will be measured again.

- Talk to your doctor or others on your health care team if you have questions. You may request more written information from the Library for Health Information at (614) 293-3707 or email: health-info@osu.edu.