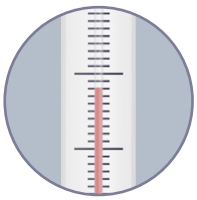
ASSESSMENT OF PERIPHERAL ARTERIAL DISEASE

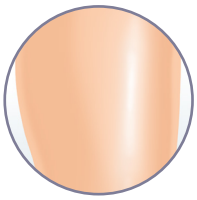
What is Peripheral Arterial Disease (PAD)?	Risk Factors	Symptoms
• Narrowing or blockage of vessels that carry blood away from heart • Caused by atherosclerosis, which reduces blood flow to extremities • Can happen in any blood vessel, but occurs more commonly in legs than in arms	• Smoking • Hypertension • Atherosclerosis • Diabetes • High cholesterol • > 60 years of age	• Pain, aches, or cramps in legs that begins with physical activity • Pain improves with rest. Up to 4 in 10 people with PAD have no leg pain.

Physical Assessment



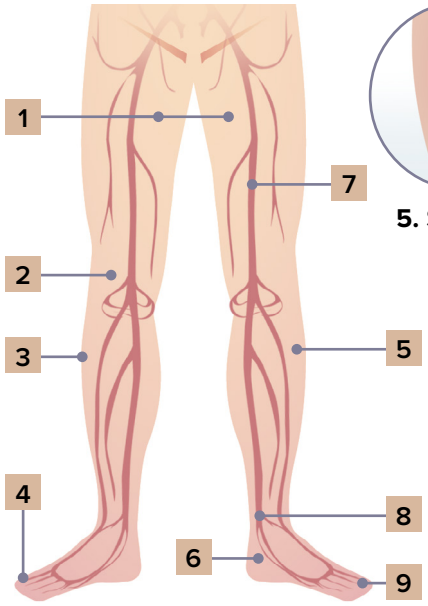
1. Temperature difference from one leg to the other

2. Pale or bluish skin



3. Smooth, shiny skin with hair loss

4. Decreased capillary refill time in toes



5. Swelling

6. Sores or ulcers that don't heal

7. PAD artery

8. Absent or weak pulses in feet

9. Toes are cold or numb

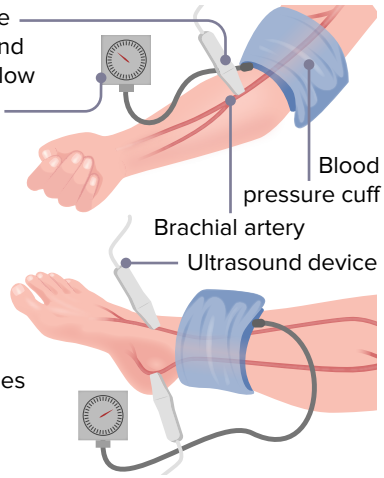
Diagnosis

A Ultrasound device amplifies the sound of arterial blood flow

B Systolic pressure recorded in the brachial artery of the arm

C Sound of arterial blood flow located in ankle

D Systolic pressure recorded in arteries of the ankle after each arterial flow is located



The ankle-brachial index (ABI) test can be used to diagnose PAD.

The test compares blood pressure between the upper and lower extremities.

$$\frac{\text{Highest systolic ankle pressure}}{\text{Highest brachial systolic pressure}} = \text{ABI}$$

> 1.4	Vessel hardening
1.0–1.4	Normal
0.9–1.0	Acceptable
0.8–0.9	Mild arterial disease
0.5–0.8	Moderate arterial disease
< 0.5	Severe arterial disease

Additional possible testing:

- Exercise ABI test
- Blood work (lipids, glucose)
- 6-minute walking test
- Doppler ultrasound
- Computed tomography angiography
- Magnetic resonance angiography
- Catheter-based angiography

Early diagnosis and management of PAD can help treat symptoms and reduce risk for serious complications.

NOTES