Before performing the ABI:

Instruct the patient to rest in a supine position with shoes and socks off for 5 – 10 minutes

Ensure proper size and placement of cuffs

Equipment:

1. Sphygmomanometer
2. Handheld continuous wave Doppler (5 or 8mHz )
3. Ultrasound gel – do not use other lubricants as this will damage the Doppler probe
4. Blood pressure cuffs (2 - 10 cm Hokanson cuffs and 2 - 12 cm Hokanson cuffs)
5. Tissues
6. Calculator
7. Form to record results

Step 1: Apply the appropriately sized blood pressure cuff on the extremity at the arm.

Step 2: Apply Doppler gel to skin surface.

Step 3: Turn on the Doppler and place probe in the area of the pulse at a 45-60 degree angle to the surface of the skin.

Step 4: Move the probe around until the clearest arterial signal is heard.

Step 5: Inflate the blood pressure cuff to approximately 20 mm Hg above the point where systolic sounds are no longer heard.

Step 6: Gradually deflate until the arterial signal returns. This is the systolic pressure. Record the pressure reading.

Step 7: This process is repeated for all extremities, measuring bilateral brachial, dorsalis pedis, and posterior tibial arteries.