

# ULTRASOUND PROTOCOLS



Reviewed: 01/11/2024; New: March 31, 2023

## Limited Ankle Brachial Index Ultrasound Protocol Guideline

<b>Indication</b>	PAD, pain with walking (claudication), numbness, paralysis (weakness), pulselessness (of dorsalis pedis and posterior tibial pulsus) and pallor of distal extremities.
<b>Prep</b>	ABI is performed by measuring the systolic blood pressure from both brachial arteries and from both the dorsalis pedis and posterior tibial arteries after the patient has been at rest in the supine position for 10 minutes.
<b>Procedure</b>	<p>It is recommended to begin with the right arm, then the right leg, then the left leg, and finally the left arm, as the blood pressure may drift during the exam, and the two arm pressures at the beginning and end of the exam provide for some quality control.</p> <ul style="list-style-type: none"><li>- Measure the brachial pressures</li><li>- Measure the ankle pressures at the dorsalis pedis (DP) and posterior tibial (PT) arteries in the foot.</li><li>- Document doppler waveforms for DP and PT arteries as triphasic, biphasic, monophasic, or absent.</li><li>- Calculate the ABI: An ABI is calculated for each leg. The ABI value is determined by taking the higher pressure of the 2 arteries at the ankle, divided by the brachial arterial systolic pressure. In calculating the ABI, the higher of the two brachial systolic pressure measurements is used.</li><li>- Record all information on the tech worksheet</li></ul>
<b>DISCLAIMER</b>	<p><b>If you have an automated unit, please disregard the manual process described above. The automated printout may be scanned into PACS instead of the tech worksheet. At a minimum, an automated printout must include:</b></p> <ul style="list-style-type: none"><li>-brachial pressures</li><li>-DPA &amp; PTA pressures with doppler waveforms</li><li>-calculated ABIs.</li></ul>