ULTRASOUND PROTOCOLS



Reviewed: 1/10/2025; 01/11/2024; New: March 31, 2023

Limited Ankle Brachial Index Ultrasound Protocol Guideline

Indication	PAD, pain with walking (claudication), numbness, paralysis (weakness), pulselessness (of dorsalis pedis and posterior tibial pulsus) and pallor of distal extremities.
Prep	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.
Procedure	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.
	- Measure the brachial pressures
	 Measure the ankle pressures at the dorsalis pedis (DP) and posterior tibial (PT) arteries in the foot.
	 Document doppler waveforms for DP and PT arteries as triphasic, biphasic, monophasic, or absent.
	- 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.
	 Record all information on the tech worksheet
DISCLAIMER	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:
	-brachial pressures
	-DPA & PTA pressures with doppler waveforms
	-calculated ABIs.