ULTRASOUND PROTOCOLS



Reviewed: 01/29/22; 10/30/20

Lower Extremity Venous (LEV) Ultrasound Protocol Guideline

Indication	Pain, swelling, redness, f/u thrombosis
Prep	Patient supine with leg externally rotated
Special	Probe is to be placed on the vessel with color and spectral Doppler imaging performed while the
Instruction	sonographer simultaneously compresses/squeezes the calf.
Procedure	Transverse grayscale with and without compression
	Common Femoral Vein
	Greater Saphenous Junction
	Greater Saphenous Vein
	Superficial Femoral Vein prox, mid, and distal
	Popliteal Vein prox and distal
	Longitudinal Color and Spectral Doppler
	Common Femoral Vein (with Valsalva)
	 Note: If unilateral, do contralateral side if the side undergoing evaluation is
	positive
	Greater Saphenous Junction (with Valsalva)
	Profunda (with augmentation)
	 Superficial Femoral Vein proximal, mid, and distal (with augmentation)
	Popliteal Vein proximal and distal (with augmentation)
	Calf Veins
	 Transverse grayscale with and without compression (prox, mid, distal)
	Transverse color Doppler image
	Popliteal Fossa
	Survey and take one image of the popliteal space if normal
	Document the presence of a Baker's cyst with grayscale and color Doppler, and measure
	in 3 dimensions
	Additional Notes:
	 Document the location and extent of any thrombus with grayscale and color Doppler. If
	thrombus is seen within the proximal GSV, document the distance from the SFJ.
	 augmentation is to be performed on all lower extremity vessels (no augmentation is to be performed if there is known/documented clot within the calf veins)