

Extremity Lymphangiogram

Bill as MRI Extremity w/ + w/o Contrast and MRA Extremity w/ + w/o Contrast.

Place hand of arm to be imaged on IV board palm up. Place IV in opposite arm.

Use body coil. Need to image from wrist to shoulder. May need to break up sequences into two sets (shoulder/arm and forearm/wrist). If in two sets, overlap some at elbow and name sequences upper and lower.

The arm being imaged needs to remain stationary as subtractions may be needed.

After the tech has positioned patient on scanner, he/she will chloroprep and lather viscous lidocaine around the webspaces of the hand of the arm to be imaged.

Supplies needed for hand injection – 1 pair sterile gloves, 1 pack sterile blue towels, 1 pack 4x4s, 4 1 mL tuberculin syringes w/ needles attached, 1 3 way stopcock, 1 12 mL syringe, 1 3.5 cm 18 g needle, 2 chloropreps, 30 mL Clariscan, 1 bottle/ampule 1% lidocaine, 1 bottle 0.5% bupivacaine and 1 bottle viscous lidocaine.

Pulse Sequence	PACS Name	plane	fat sat	slice (mm)	gap (mm)	first slice	Field of View
T2 TSE	T2 FS AX UPPER	ax	yes	4	0.5	top	upper arm
T2 TSE	T2 FS AX LOWER	ax	yes	4	0.5	top	lower arm
T1 VIBE/LAVA	T1 FS AX UPPER	ax	yes	3	0	top	upper arm
T1 VIBE/LAVA	T1 FS AX LOWER	ax	yes	3	0	top	lower arm

Inject 1 mL of contrast mix into each of the 4 webspaces of the hand using tuberculin syringes. Inject over a few seconds.

Mixture is 10 mL contrast, 1 mL 1% lidocaine and 1 mL 0.5% bupivacaine. Inject into webspaces without worrying about making a wheal like with breast lymphoscintigraphy.

T1 VIBE/LAVA	T1 FS 5 MIN LOWER	ax	yes	3	0	top	lower arm
T1 VIBE/LAVA	T1 FS 5 MIN UPPER	ax	yes	3	0	top	upper arm
T1 VIBE/LAVA	T1 FS 10 MIN LOWER	ax	yes	3	0	top	lower arm
T1 VIBE/LAVA	T1 FS 10 MIN UPPER	ax	yes	3	0	top	upper arm
T1 VIBE/LAVA	T1 FS 15 MIN LOWER	ax	yes	3	0	top	lower arm
T1 VIBE/LAVA	T1 FS 15 MIN UPPER	ax	yes	3	0	top	upper arm
T1 VIBE/LAVA	T1 FS 20 MIN LOWER	ax	yes	3	0	top	lower arm
T1 VIBE/LAVA	T1 FS 20 MIN UPPER	ax	yes	3	0	top	upper arm
T1 VIBE/LAVA	T1 FS 25 MIN LOWER	ax	yes	3	0	top	lower arm
T1 VIBE/LAVA	T1 FS 25 MIN UPPER	ax	yes	3	0	top	upper arm
T1 VIBE/LAVA	T1 FS 30 MIN LOWER	ax	yes	3	0	top	lower arm
T1 VIBE/LAVA	T1 FS 30 MIN UPPER	ax	yes	3	0	top	upper arm

CONTRAST - 2 mL/sec standard dose gadolinium (0.2 mL/kg Clariscan or 0.1 mL/kg Gadavist) followed by 20 mL saline flush.

T1 VIBE/LAVA	T1 FS VEN LOWER	ax	yes	3	0	top	lower arm
T1 VIBE/LAVA	T1 FS VEN UPPER	ax	yes	3	0	top	upper arm
T1 VIBE/LAVA	T1 FS POST COR	cor	yes	3	0	front	whole arm