

2018 Vascular Access for Hemodialysis Symposium

May 10-12, 2018
New Orleans, LA



Vessel Mapping

What Are Key Elements, How Are They
Interpreted and Findings Shared with the
Dialysis Access Care Team

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New Patient Evaluation For AV Access

New Patient Evaluation



New Patient Evaluation

Time	Ht (in)	Wt (lb)	BMI	BP	Position	Side	Site
4:12 PM				172/87	sitting	right	arm
4:03 PM		111.00	18.47	179/80	sitting	left	arm
						right	

Time	Ht (in)	Wt (lb)	BMI	BP	Position	Side	Site
3:32 PM				130/73	sitting	left	arm
3:30 PM		253.00	33.38	101/58	sitting	right	arm

New Patient Evaluation

- Why does the patient need vascular access
 - CKD
 - Backup for PD
 - ESRD on dialysis with catheter
- Cause of Renal Failure
 - DM – particularly long standing Type I
 - Autoimmune
 - Atherosclerosis

New Patient Evaluation



New Patient Evaluation - History

- Venous cannulation
 - IJ catheters for HD
 - Pacemaker/Defibrillator
 - Port-a-cath
 - Pic lines
- Previous access
 - AVF
 - AVG
- Dominant arm
- Trauma
- Surgery
 - Mastectomy
 - Axillary dissection

New Patient Evaluation

☐ IJ Catheter, Right	☐ IJ Catheter, Left
☐ PAC, Right	☐ PAC, Left
☐ Pacemaker	
Surgical Scarring:	

☒ IJ Catheter, Right	☐ IJ Catheter, Left
☐ PAC, Right	☒ PAC, Left
☒ Pacemaker	
Surgical Scarring: Base of both sides	

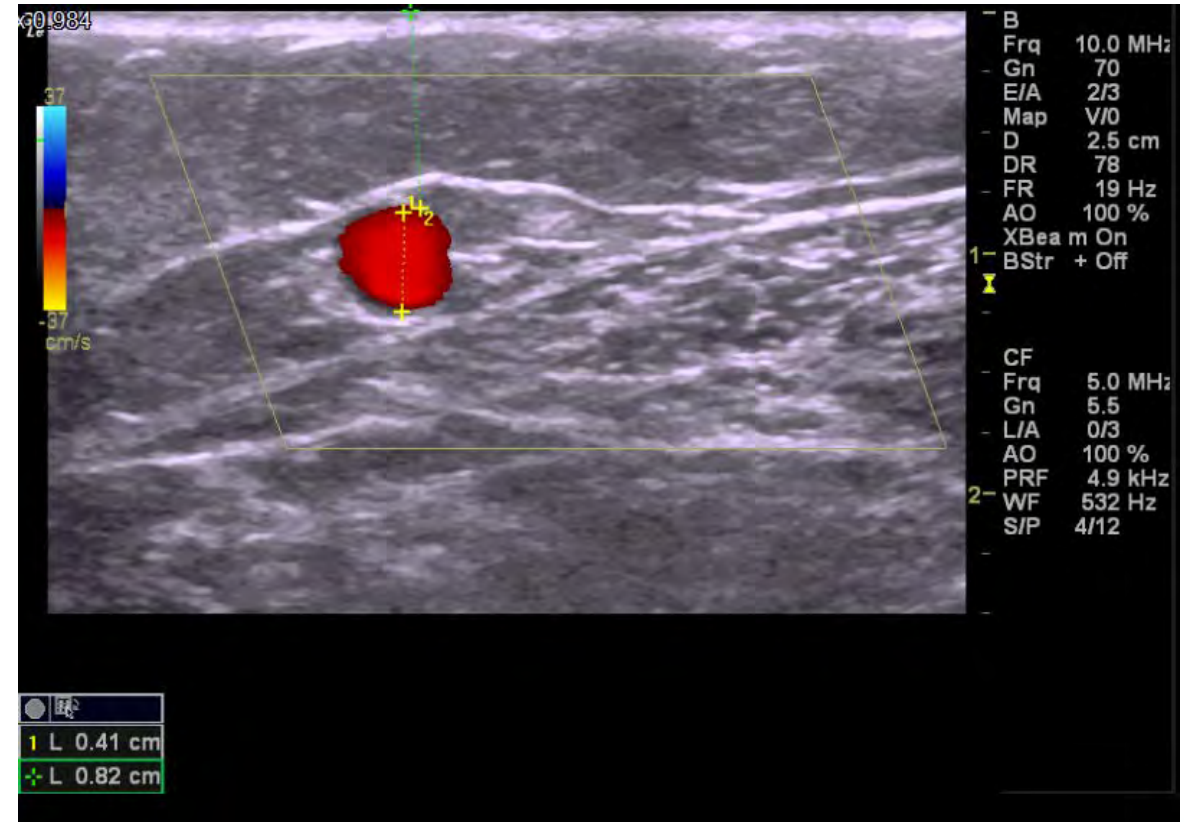
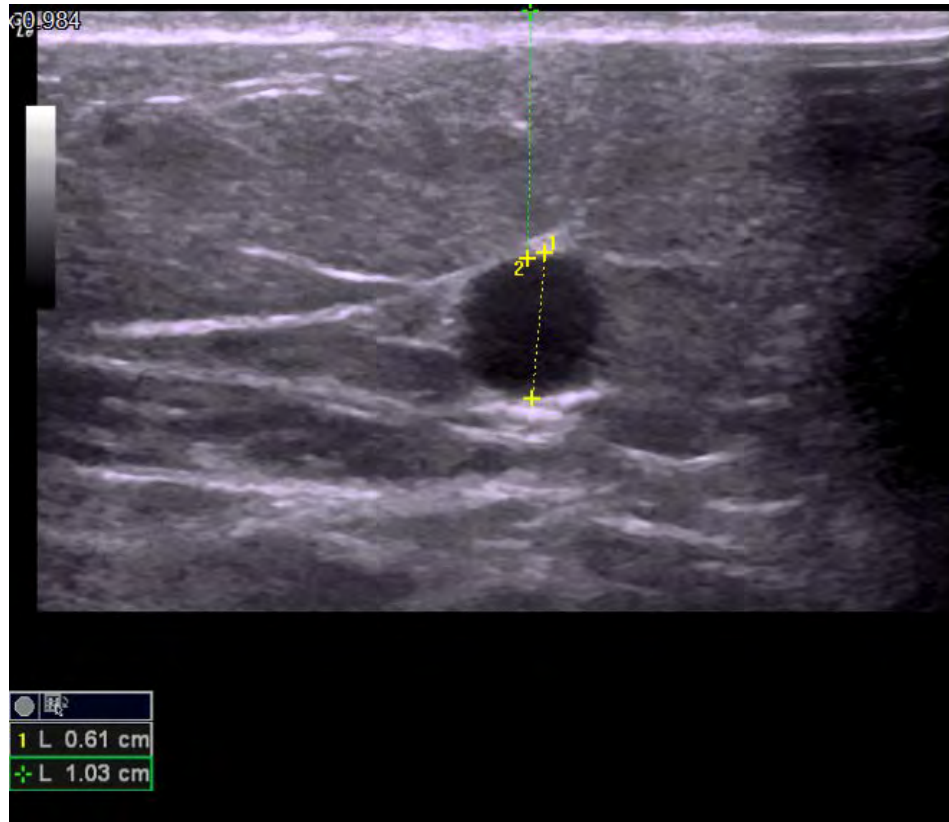
Pulses - Upper	Right	Left
Carotid Bruit:		
Brachial:	2+	2+
Radial:	2+	2+
Allens Test:	normal	normal

Pulses - Upper	Right	Left
Carotid Bruit:		
Brachial:	2+	2+
Radial:	1+	Non-Palp
Allens Test:	normal	abnormal

New Patient Evaluation



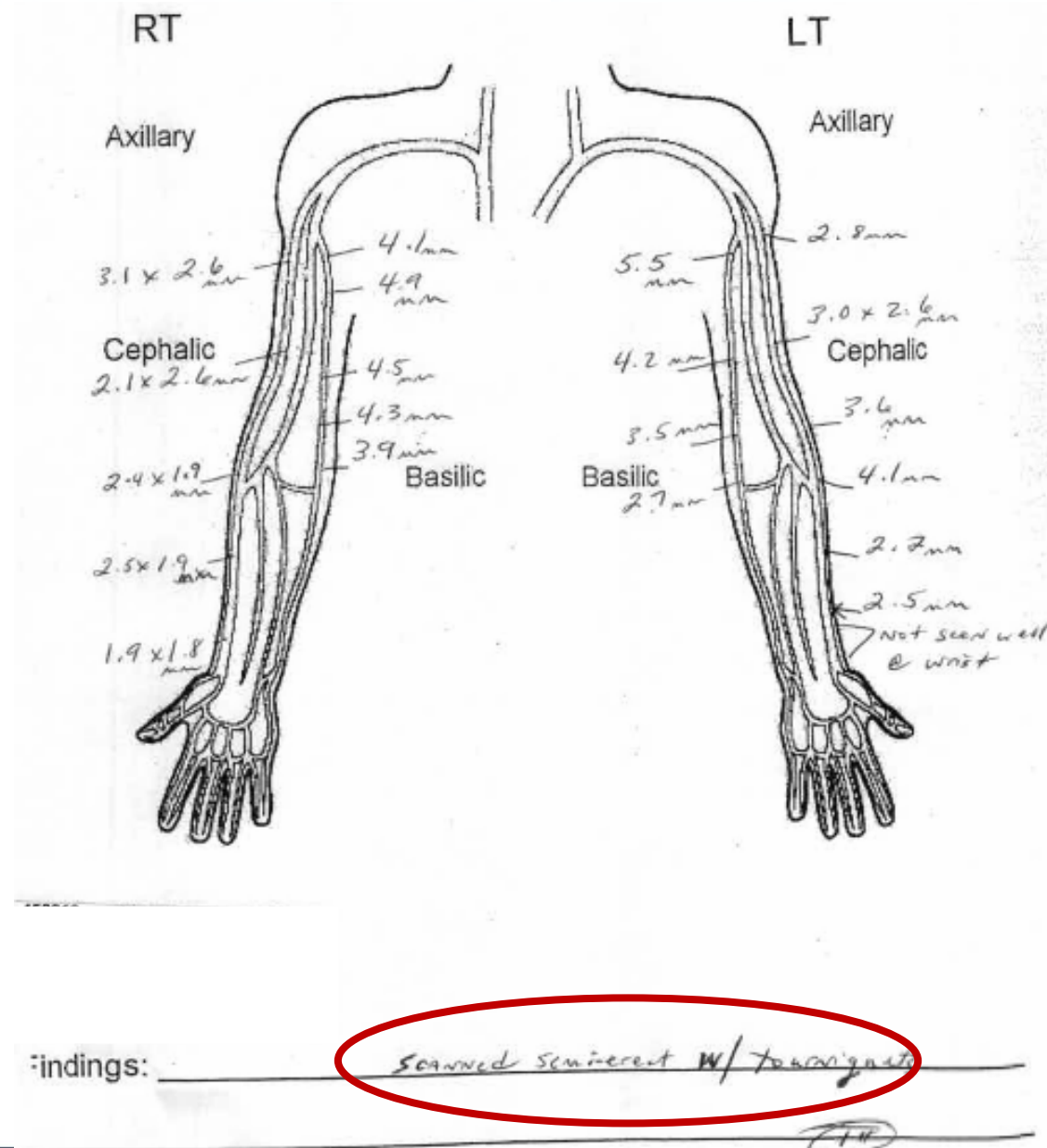
New Patient Evaluation



New Patient Evaluation

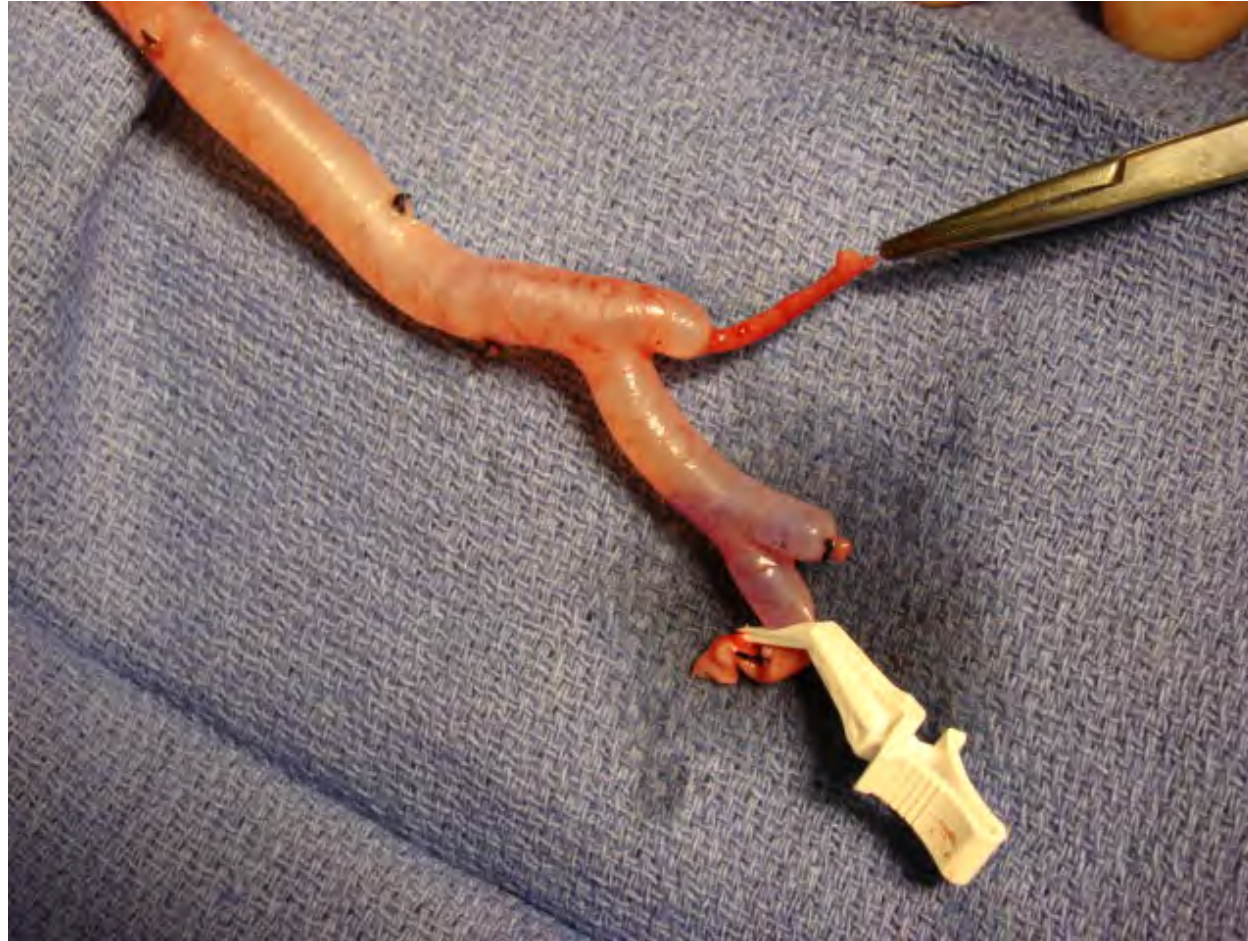


Ultrasound Mapping

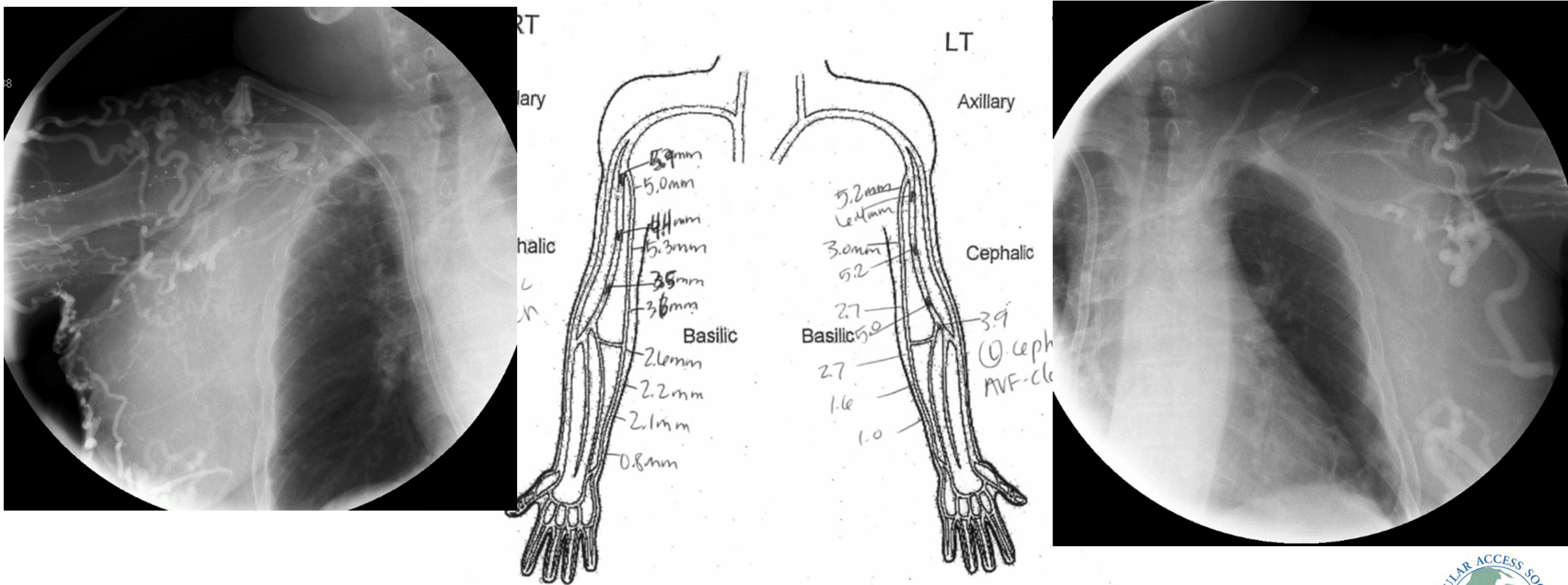


Venogram





New Patient Evaluation



Conclusion

- Mapping is critical to choosing proper access
- US is first choice for mapping
 - Warm room
 - Tourniquet
 - Arm dependent
- Venogram is study for patient already on dialysis with history of central vein instrumentation
 - Warm room
 - Tourniquet

Conclusion

- Not ESRD
 - US mapping by surgeon
 - US mapping in radiology
- ESRD
 - US mapping by surgeon
 - Venograms if history of central venous catheters or devices
- Repeat if poor vessels first time
 - Dehydrated
 - Cold
 - Scared