Vascular Ultrasound Resident Rotation

Goals:

1. Be in the UAMS Vascular Lab from 8:00AM to 4:30PM, except for 1:00 PM conference.

Examinations to observe:

Venous duplex exams, lower and upper extremity

Carotid duplex exams

Extremity arterial duplex

Physiologic arterial exams (Segmental Pressures, Ankle-Arm Indices, Toe pressures, Treadmill testing)

- 2. Keep a record of the examinations you observe and interpret.
- 3. Review the vascular ultrasounds from the outside hospitals each day (Arkansas Heart Hospital and Ouachita County Medical Center.) Correlate your interpretation with staff's reading. Choose a "down time" in the vascular lab. This may take 1-2 hours, make use of the "down time" in the vascular lab.
- 4. Attend Vascular Conference every week, currently this takes place in the radiology conference room Tuesdays, 4:00PM 5:00PM.
- 5. Reading assignments: assigned chapters in Zeibel, Vascular Ultrasound and Physiologic testing and techniques. (Book will be loaned to you for the month)
 - 1. Introduction to Vascular Ultrasound 4th Edition, William Zwiebel, M.D., W.B. Saunders Co. 2000
 - Chapter 2 Physics and Instrumentation in Doppler and B-Mode Ultrasonography
 - Chapter 3 Doppler Frequency Spectrum Analysis
 - Chapter 4 Color-Flow Imaging for Vascular Diagnosis
 - Chapter 8 Normal Carotid Arteries and Carotid Examination Technique
 - Chapter 10 Doppler Evaluation of Carotid Stenosis
 - Chapter 11 Misc. Carotid Subjects:
 - Chapter 12 Ultrsound of Vertebral Examination
 - Chapter 15 Arterial Anatomy of the Extremities
 - Chapter 16 Non-Imaging Pyhysiologic Tests for Assessment of LE Arterial Dz
 - Chapter 17 Assessment of Upper Extremity Arteries
 - Chapter 18 Duplex Sonography of Lower Extremity Arteries
 - Chapter 19 Rationale for Duplex Ultrasound Assessment of Extremity Veins
 - Chapter 20 Extremity Venous Anatomy
 - Chapter 21 Terminology, Instrumentation, and Characteristics of normal veins
 - Chapter 22 Extremity Venous Examination: Technical Considerations

Chapter 23 Venous Thrombosis
Chapter 24 Definitive Diagnosis and documentation of chronic venous dysfunction

2. Physiological Testing: Techniques and Interpretation Robert Scissions, RVT (Unetixs, Inc.) book will be loaned to you Objectives: At the end of the rotation, the resident will:

- Understand the physics and instrumentation needed to perform vascular US examinations
- 2) Be able to supervise vascular ultrasound exams performed by a technologist
- 3) Be able to recognize a technically adequate exam
- 4) Interpret the following vascular ultrasound exams:
 - a) upper and lower extremity venous duplex exam
 - b) carotid duplex exams
 - c) upper and lower extremity arterial duplex exams
 - d) physiologic arterial exams

Vascular Ultrasound Resident Rotation	Name
	Dates of Rotation

Goals:

1. Be in the UAMS Vascular Lab from 8:00AM to 4:30PM, except for 1:00 PM conference.

Examinations to observe:

Venous duplex exams, lower and upper extremity
Carotid duplex exams
Extremity arterial duplex
Physiologic arterial exams (Segmental Pressures, Ankle-Arm
Indices, Toe pressures, Treadmill testing)

- 2. Keep a record of the examinations you observe and interpret.
- 3. Review the vascular ultrasounds from the outside hospitals each day (Arkansas Heart Hospital and Ouachita County Medical Center.) Correlate your interpretation with staff's reading. Choose a "down time" in the vascular lab. This may take 1-2 hours, make use of the "down time" in the vascular lab.
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2. Physiological Testing: Techniques and Interpretation

Robert Scissions, RVT (Unetixs, Inc.) book will be loaned to you Objectives: At the end of the rotation, the resident will:

- 5) Understand the physics and instrumentation needed to perform vascular US examinations
- 6) Be able to supervise vascular ultrasound exams performed by a technologist
- 7) Be able to recognize a technically adequate exam
- 8) Interpret the following vascular ultrasound exams:
 - e) upper and lower extremity venous duplex exam
 - f) carotid duplex exams
 - g) upper and lower extremity arterial duplex exams
 - h) physiologic arterial exams

Vascular Ultrasound Rotation Post Review Accomplishments:

Name		
Rotation	dates	
Date		

1. UAMS Vascular Lab from 8:00AM to 4:30PM, except for 1:00 PM conference. Examinations to observe:

Venous duplex exams, lower and upper extremity

Carotid duplex exams

Extremity arterial duplex

Physiologic arterial exams (Segmental Pressures, Ankle-Arm Indices, Toe pressures, Treadmill testing)

- 2. According to the log you kept, how many of the examinations you observe and interpret.
- 3. Review the vascular ultrasounds from the outside hospitals each day (Arkansas Heart Hospital and Ouachita County Medical Center.) Correlate your interpretation with staff's reading. Choose a "down time" in the vascular lab. This may take 1-2 hours, make use of the "down time" in the vascular lab.
- 4. Attend Vascular Conference every week, currently this takes place in the radiology conference room Tuesdays, 4:00PM 5:00PM.
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2. Physiological Testing: Techniques and Interpretation

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PLEASE RATE THE FOLLOWING (10 Best ----- 1 Worst)

1. Did you learn the physics and instrumentation used in vascular US?										
	1	2	3	4	5	6	7	8	9	10
2. Did you learn the indications for performing vascular US exams?										
			Yes		No					
3. Are you able to supervise vascular US exams performed by a technologist?										
			Yes		No					
4. Did you gain sufficient experience to independently interpret the following exams:										
a)	upper	and lo	wer exti	remity v	enous Do	ppler				
	1	2	3	4	5	6	7	8	9	10
b)	b) carotid duplex									
	1	2	3	4	5	6	7	8	9	10
c) upper and lower extremity arterial duplex										
	1	2	3	4	5	6	7	8	9	10
d)) physiologic arterial exams									
	1	2 2	3 3	4	5 5	6 6	7 7	8 8	9 9	10
	Did you Are you Did you exams a) b)	Did you learn Are you able Did you gain exams: a) upper 1 b) caroti 1 c) upper 1 d) physic	Did you learn the in Are you able to support and logonal and logo	Did you learn the indication Yes Are you able to supervise very yes Did you gain sufficient experiments: a) upper and lower extra 1 2 3 b) carotid duplex 1 2 3 c) upper and lower extra 1 2 3 d) physiologic arterial experiments and the second seco	Did you learn the indications for personal Yes Are you able to supervise vascular to Yes Did you gain sufficient experience to exams: a) upper and lower extremity volume 1 2 3 4 b) carotid duplex 1 2 3 4 c) upper and lower extremity at 1 2 3 4 d) physiologic arterial exams 1 2 3 4	Did you learn the indications for performing and yes No Are you able to supervise vascular US exams Yes No Did you gain sufficient experience to indeper exams: a) upper and lower extremity venous Do 1 2 3 4 5 b) carotid duplex 1 2 3 4 5 c) upper and lower extremity arterial du 1 2 3 4 5 d) physiologic arterial exams 1 2 3 4 5	1 2 3 4 5 6 Did you learn the indications for performing vascular Yes No Are you able to supervise vascular US exams performing vascular Yes No Did you gain sufficient experience to independently exams: a) upper and lower extremity venous Doppler 1 2 3 4 5 6 b) carotid duplex 1 2 3 4 5 6 c) upper and lower extremity arterial duplex 1 2 3 4 5 6 d) physiologic arterial exams 1 2 3 4 5 6	1 2 3 4 5 6 7 Did you learn the indications for performing vascular US exams performed by Yes No Are you able to supervise vascular US exams performed by Yes No Did you gain sufficient experience to independently interpresexams: a) upper and lower extremity venous Doppler 1 2 3 4 5 6 7 b) carotid duplex 1 2 3 4 5 6 7 c) upper and lower extremity arterial duplex 1 2 3 4 5 6 7 d) physiologic arterial exams 1 2 3 4 5 6 7	Did you learn the indications for performing vascular US exams? Yes No Are you able to supervise vascular US exams performed by a technology of the performing vascular US exams performed by a technology of the performed by a tec	Did you learn the indications for performing vascular US exams? Yes No Are you able to supervise vascular US exams performed by a technologist Yes No Did you gain sufficient experience to independently interpret the following exams: a) upper and lower extremity venous Doppler 1 2 3 4 5 6 7 8 9 b) carotid duplex 1 2 3 4 5 6 7 8 9 c) upper and lower extremity arterial duplex 1 2 3 4 5 6 7 8 9 d) physiologic arterial exams 1 2 3 4 5 6 7 8 9