

PGY-1 Ultrasound Rotation Syllabus

Learning Objectives:

1. Demonstrate competency in the primary ED Ultrasound applications listed in the ACEP 2008 Emergency US Guidelines
 - a. Describe indications for bedside ultrasound
 - b. Obtain adequate images
 - c. Interpret images in real time
 - d. Integrate findings into patient care
2. Assist with teaching ultrasound to medical students and other learners
 - a. M4 US lecture is 9a-12p on the second Tuesday of each month in the Sim Lab. You are excused from resident lecture that day.

Requirements:

1. Complete didactic curriculum
 - a. View SAEM Ultrasound lectures listed on main Ultrasound webpage
 - b. Complete quizzes (Aorta, RUQ, Cardiac, DVT, FAST, Lung, Ocular, Physics) – print score page and turn in to Dr. Rathbun
2. Complete at least 100 scans during the rotation. You will need to have 150 scans before you finish residency. This is a good opportunity to complete that requirement.
 - a. You can do multiple scans on a single patient. Scans DO NOT have to be clinically indicated. Find a friendly, thin person and scan away.
 - i. Pt with abdominal pain: eFAST, aorta, RUQ, renal, pelvis
 - ii. Pt with chest pain or shortness of breath: cardiac, lung, DVT
 - b. Record every scan
 - i. Record scans on your log sheet and turn in to Dr. Rathbun (can turn them in each day or save them until the end of the rotation; there is a folder on the shelf in the P-side workroom)
 - ii. Log scans in New Innovations (use Dr. Rathbun as supervisor if scanning independently)
3. Complete SDOTs, usually toward the end of your rotation.
 - a. FAST
 - b. AAA
 - c. RUQ

Guidelines for scanning independently

1. Let the attending(s) and residents know you are there doing ultrasounds.
2. Let the nurses know you are available to start US-guided peripheral IVs.

3. G side:
 - a. Look for pregnant patients, patients with RUQ pain, patients with flank pain, patients with possible DVTs, cellulitis vs abscess, foreign body, ocular complaints, PTAs, possible Achilles ruptures, etc.
4. P-side:
 - a. Look for patients with ascites, peritoneal dialysis patients (will have a positive FAST), chest pain, shortness of breath, shock, etc.

General rules:

1. These scans are purely educational. From time to time, they may be used in clinical decision making, but generally we are not setup to do that.
 - a. Do not enter patient info into the machine
 - b. Do not save any images
 - c. Do not write procedure notes in the chart (unless instructed by an attending)
2. Be sure to take proper care of the ultrasound machines, especially the Zonare machines
 - a. Proper cleaning (remove gel with washcloth and then wipe down probe and machine)
 - b. Proper storage (in proper location, plugged in, screen tilted down)
 - c. Do not run over probe cords
 - d. Do not drop or otherwise damage probes
3. Be mindful of what you say to patients while you are scanning.
 - a. Patients are in the ED to try to figure out why something is causing their symptoms. If you say “everything looks fine”, they’ll think that applies to EVERYTHING. We don’t look at everything, we do focused exams. For example, pregnant women with bleeding or cramping are in the ED for reassurance. If we see a heartbeat and a live fetus, it doesn’t mean they’re not going to lose the pregnancy, it means that at that moment in time, there is a heartbeat. If we say “everything looks fine”, they could infer that we have looked at the brain, spine, organs, etc and there are no anomalies – which is not something we do.
 - b. It is fine to tell patients what you’re looking at, what you’re seeing, and what you’re not seeing. For example, “We’re looking at your gallbladder. We don’t see any stones, the wall thickness is normal, there’s no fluid around your gallbladder, and your common bile duct is a normal size. This doesn’t explain what’s causing your pain, but it suggests that your gallbladder likely isn’t the problem”.
 - c. Be polite to patients. Ask patients if you can scan them before you push the ultrasound into their room. Drape them appropriately, clean the gel off them when done scanning, put their bed back the way it was (raise the head of the bed back to where it was if you lowered it; put the rails back up, make sure you put their call bell back in reach if you moved it, etc). Thank them for allowing you to scan them.

If you have any issues with anything (including problems with the machines) during the rotation, please get in touch with Dr. Rathbun.