

EPA 5 Teaching Tips: Performing presurgical localization using ultrasound or mammographic guidance

When teaching trainees how to perform presurgical localization, it is important to talk them through the procedure and engage them in the process, even if they are observing for the first time. Having them review relevant resources prior to the rotation is also beneficial to provide a foundation and context for their learning. Discussing steps from why the procedure is performed, to which localization device and modality is used, and how needle/device length and approach are determined are essential to understanding the procedure. Once discussed, you can use corollary questions to gauge a trainees' comprehension of the topics.

Pre-Procedure:

- If the biopsy clip were located here (point or mark a spot on the CC and ML), what would be your approach? How would the breast be positioned? What needle/device length would you use?
- Can you think of some instances when a lesion may not be amenable to localization (device, technique, and location dependant)?

Procedure

- Discuss how and why you hold the device a certain way and why the patient is positioned in such a way
- Point out optimal placement of localization device, and if misplaced, next steps
- Review information provided to the surgeon on film, report, or additional papers (institution specific) and why such information is provided

Post-procedure

- Before ending the case, ask the trainee what they would be looking for in the specimen to indicate that the surgery was successful (target, entire wire/hook or localization device) and how to document/communicate findings appropriately - this is specifically important for cases with residual calcifications, bracket localization, displaced clip, when wide margins were indicated, or when localization and surgery are disjointed.
- Trainees should understand when and why a specimen is radiographed and why some are checked with ultrasound (Localizations performed under ultrasound using needle/wire). Note specimens are either radiographed or checked with ultrasound to document the target and localization device have been removed. With newer modalities for localization, this can vary.

Informed consent:

- Use a staged model for informed consent:
 - a. Resident/fellow observes you obtaining informed consent
 - b. Role play with trainee prior to first informed consent: "Pretend I am the patient and you are obtaining informed consent. What would you say?" - This is a great way for trainees to practice before speaking with the patient, while also providing an opportunity for feedback and guidance
 - c. You observe resident/fellow obtaining informed consent

Resident/fellow obtains informed consent prior to you entering room

Once you have been able to observe the trainee perform at least 5 procedures (from start to finish) of each localization modality, check > 10 specimen radiographs/ultrasounds, and discussed 5-10 case based discussions, you are ready to evaluate the trainee on this EPA.