Melinda Moore Lewis, MD, FCAP
In Transformational Pathology, Thinking Clinical is Critical

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Melinda Moore Lewis, MD, FCAP, on fine-needle aspiration

"I started doing fine-needle aspirations (FNA) with a breast surgeon," said Melinda Moore Lewis, MD, FCAP, describing her early years in practice at the Emory University-affiliated hospitals in Atlanta, Georgia. "We had a multidisciplinary cancer center: medical oncology, surgical oncology, radiation oncology, and cytopathology. I did my FNAs in the clinic building, close to the surgeons, medical oncologists, and breast imaging. It was an ideal setting to establish and develop an FNA service, and it continues to grow today in our Winship Cancer Institute."

"At the very beginning," she said, "I was also doing surgical pathology. I was working with a breast surgeon who saw patients on Mondays and then operated on Wednesdays." Dr. Lewis asked him about integrating FNA in his practice. "He said, 'I'm not sure about this; you'll have to do 50 of them to convince me. You do the FNAs on Mondays, and we'll see what you get. I'll do the biopsies on Wednesdays—and we'll see how this goes.' It was almost like those soap companies that put a bar of soap in your mailbox so you'll try it."

That was 1988; Dr. Lewis had trained in anatomic and clinical pathology as well as cytopathology at the Emory University School of Medicine and completed further FNA training at the Karolinska Institute in Stockholm, Sweden. Those FNA "free samples" established Dr. Lewis' credibility. She went on to build the FNA service at Emory, where she is now an associate professor in the department of pathology and laboratory medicine. She is also the first pathologist there to receive a secondary appointment in the department of radiology, to acknowledge the close collaboration and strong working relationship she developed over many years.

It's the special mix and balance of clinical collaboration with direct patient care that makes FNA so engaging for Dr. Lewis and her team. They love their work. "We go out and introduce ourselves to our patients in the waiting room and bring them back," she said, warming to her subject. "Often the patient's family members want to accompany them to the procedure room. I always make sure it's OK with the patient—you do what makes them feel most comfortable. As a result, you're often doing the procedure with several people watching your every move. In this setting, you directly observe the impact of your work on both the patients and their families. This represents a major paradigm shift for many of my colleagues."

“In FNA,” Dr. Lewis said, “the pathologist sets the tone for the clinical encounter. Patients have to know that we are going to take care of them; that we are going to be accurate, careful, and respectful; that we are going to care for their physical and emotional needs; and that we are going to quickly give them information that they can rely on. It’s important for them to know that at Emory, we are all working together for their benefit on a multidisciplinary team, and that we communicate well with each other.

Dr. Lewis devotes much of her time to the FNA service while teaching medical students, residents, and fellows. She also collaborates closely with other anatomic and clinical pathologists and clinicians. Sometimes they connect by sharing their toys. Whether it’s FNA, flow cytometry, PCR (polymerase chain reaction), or immunohistochemistry, new technologies are always a draw.

“There are a lot of surgeons out there who have an appreciation for pathology.” Dr. Lewis said. “They love to sit and look into the microscope. Many of the new molecular techniques can be applied to cytology, too; that’s an exciting part of it. I say, ‘Sit down. Take a look at this and get feedback on what we’ve collected.’ They really enjoy it.”

At Emory, pathologists and supervised residents and fellows collect specimens from palpable masses; radiologists obtain them via imaging guidance. “To support radiology, we’re onsite,” Dr. Lewis explained, “but the radiologist collects the specimen. We tell them if they are in a lesion or in normal tissue and if they have provided us with enough material to make a definitive diagnosis. We also let them know right then whether they need to go back and collect fresh material for flow cytometry or culture.”

“I am a clinician in my soul,” Dr. Lewis said. “Making a diagnosis by FNA is like putting together a puzzle. You know the histology; you stick a needle into a nodule and withdraw the cells, express them on to a slide, smear them out, and then take the puzzle pieces and try to put them together in a way that makes sense given the clinical situation. That’s the best part—the clinical context. The morphology has to be tied to a person and a situation.”

“Talking with other clinicians is essential to what I do. I have to make sure our thinking is compatible and that I’m not giving them a result that is discordant with what they are seeing clinically. When you are getting cells and relatively small tissue fragments like those we work with, if there are any discrepancies, we have to resolve them.”

Last year, Dr. Lewis was selected to receive the annual CAP Outstanding Communicator Award, recognizing her work as chair of the CAP Public Affairs Committee and her hands-on role in the launch of the patient-education website, MyBiopsy.org. Again, it’s about pathologists reaching out to patients with clear information and making direct contact.

“Like a frozen section, an FNA provides an immediate diagnosis; however, the difference is that you’re interacting directly with the patient. The relationship is built upon trust. You have to communicate that you are confident in what you are doing,” Dr. Lewis said. “When you walk into that procedure room, you could be giving patients life-changing information. They have to be confident in you. That’s a different skill set.”