Taking the lead in breast cancer imaging

A personalized approach focused on the needs of women

Clinical expertise and cutting-edge research puts Elizabeth Wende Breast Care at the forefront of breast healthcare

Being designated a Breast Imaging Center of Excellence by the American College of Radiology is a well deserved accolade.

“We have a reputation of excellence and our referring physicians have known this for years,” says Theresa Wade, MPHA, ACMPE, Administrator at Elizabeth Wende Breast Care (EWBC) of Rochester, New York. “We have an established presence not only locally, but nationally and internationally as well.”

EWBC, one of the largest free-standing breast imaging centers in the U.S., attends to the needs of over 80,000 women each year.

Why do so many women trust EWBC? EWBC offers a unique combination of exceptional skill and compassionate care, supported by research into such promising new diagnostic technologies as ultrasound elastography.

A full service imaging center

“Our founder, Dr. Wende Young was originally board certified in internal medicine and then radiology. She then found her passion in breast imaging and intervention. Most of us have also been formally trained in either surgery or internal medicine,” explains Posy Seifert, DO, Breast Imaging Specialist. “I think we have amassed a very good group of physicians who are dedicated to doing the best breast imaging and intervention.”

Guidelines suggest a multimodality approach for comprehensive screening, diagnosis, and management of breast disease. Physicians have discovered the value of multiple imaging modalities in creating a more complete picture of the disease. For patients with abnormal screening mammograms or clinical symptoms, EWBC offers alternative imaging modalities such as breast ultrasound and MRI, supported by computer aided diagnosis (CAD). With these tools, additional information about disease characterization and extent can be acquired.

On any given day the staff at EWBC sees between 250 and 300 patients, with approximately 100 of these scheduled for diagnostic tests and the balance for screenings. Biopsies are performed on-site and analysis is conducted at the local hospital. Results are returned within 24 hours.
Seifert agrees, “If there is something that is going to be better or easier for our patients – if we can find breast lesions earlier, we owe it to them to use it. That’s why we keep doing this kind of research.”

**Elastography shows promise**

One of the newer technologies is ultrasound elastography. Elastography measures tissue stiffness and is thought to be helpful in providing additional information in tumor detection. When a mechanical compression or vibration is applied, the stiffer tumor deforms less than the surrounding tissue and a “strain” image results.

“Dr. Destounis and I are both doing research in elastography” says Seifert. “I’ve been using the Philips elastography software since the end of September 2010 and have accrued almost 50 cases so far.”

Dr. Seifert is using the Philips iU22 premium ultrasound system with elastography for breast imaging. Philips breast elastography is an exciting new method of tracking tissue deformation requiring virtually no external

**Research for new insights**

Ongoing research is critical to EWBC’s success. The ability to offer the latest procedures and technologies strengthens diagnostic capabilities.

“We have to stay current,” insists Stamatia Destounis, MD, Breast Imaging Specialist and Managing Partner. “We have to look outside the box. We have to consistently push the envelope to discover what else we can do to improve visualization of lesions.”

EWBC participated in the “Breast Cancer (DMIST) – Screening with Digital Mammography”, and the “MRI Evaluation of the Contralateral Breast in Women with a Recent Diagnosis of Breast Cancer” – both part of the ACRIN clinical trials.

Today their efforts include research in:
- Breast tomosynthesis
- Cone-beam breast CT
- Elastography

“For each of these new technologies there is a utility,” says Destounis. “No one modality is perfect.”

“We are also involved in many research projects,” says Wade. “This helps us remain on the cutting-edge of our industry. It also helps us employ the latest and greatest equipment to help form a valid opinion about the very best treatment for our patients.”

**Like family**

Staff at EWBC is trained to listen closely to patient concerns and questions, and address them promptly. Two full-time patient advocates are available to personalize the visit and attend to anyone who is anxious or having a difficult time with the process. Seifert notes, “We’re more like family practitioners because we treat each patient in a holistic fashion, from the beginning of regular screening, through any biopsy, to follow-up exams, and even treatment advice. A lot of patients become part of our extended family.”

This effort to comfort patients extends to the warm and inviting facility surroundings. “We’ve modeled our office and experience based on patient demand,” Wade says. “We have massage therapists to relax patients, fireplaces to warm the atmosphere, tropical fish tanks, and views to the woods outside for a nice visual distraction – all to make the environment as pleasant as it can be.”

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“Once a woman comes to us, it is very rare that they ever go anywhere else.”

Theresa Wade, Administrator, EWBC
Elastography is a technique that measures the elasticity of tissues. It involves applying compression for obtaining strain imaging. The elastogram can quickly and easily be compared to 2D images to measure and assess lesion size and shape.

“When I do elastography,” Seifert continues, “I compare it to my regular ultrasound B mode. It gives me an added dimension, an additional ‘look’ at the lesion. It helps me see the borders of the mass more clearly than with regular ultrasound. It’s a perfect addition to other modalities and a different way to get into the morphology of the lesion.”

Dr. Destounis has been utilizing elastography in her clinical practice since 2007 and has collected several hundred cases. In her studies, Dr. Destounis is seeing similar, positive results. “For a new lesion that I think I may biopsy,” she says, “I’ll do elastography to confirm my thoughts. An elastogram looks at how dense, how firm the tissue is. I find it works quite well for most lesions and I use it on all solid lesions I’m going to end up biopsying. I also use it for partially cystic masses or those I believe are fluid filled, but about which I’m not 100% sure.”

“It helps to reinforce confidence and help with my decisions,” Destounis concludes. Dr. Destounis published on the subject of elastography with an article in ‘Radiographics’, a review publication of the Radiological Society of North America, Inc. in late 2009. She has also presented her data both at RSNA and AIUM.

Quick, precise ultrasound
Dr. Seifert uses the Philips iU22 premium ultrasound system on a regular basis. “I’m very comfortable using the iU22,” says Seifert. “It is so easy to operate I can have a regular medical assistant come in with me and I can tell her which button to push – it’s quite self explanatory.”

Ease-of-use is characterized by breakthrough system automation including dedicated breast imaging that integrates state-of-the-art technology like:

- **SmartExam** – increases consistency and speed by automatically planning and processing application protocols
- **XRES Adaptive Image Processing** – provides real-time image enhancement that reduce speckle, haze and clutter artifacts
- **Tissue aberration correction** – corrects for speed of sound changes through adipose tissue, sharpens spatial resolution, reduces the effects of acoustic beam distortion, and improves tissue uniformity

Breast imaging with the iU22 involves use of the L12-5 transducer. This high resolution, broadband linear array transducer is specifically designed for superficial applications such as breast imaging. The Advanced Breast Tissue Specific Imaging (TSI) preset on the L12-5 helps users confidently distinguish between cystic and solid masses.

Dr. Seifert finds the tissue aberration correction (TAC) feature improves detail resolution of breast lesions. “On many occasions it’s hard to visualize superficial lesions so we use the TAC. It comes in really handy. In fact, in my experience, the iU22 is in general, quick, precise and gives me my required information within 10 seconds.”

“If the mass is indeterminate, elastography helps me confirm if I’m going to do a biopsy.”
Posy Seifert, DO, Breast Imaging Specialist, EWBC
It’s all about the patient
“We just do one thing all day long,” says Theresa Wade, “We do breast imaging and we are very good at what we do.”

At EWBC, screened patients can have their results in just two hours. Certain diagnostic patients may learn the outcome of their biopsies in three. “We want women to get accurate information and good care in a timely fashion,” says Seifert. “In fact, if we send a fine-needle aspiration out ‘stat’, we can receive the results back within three hours.”

Understanding the desire for a quick answer is indicative of the priority EWBC places on patients’ physical and emotional well-being. Delivering fast, quality care with a personal touch brings patients back time after time. “We don’t have to do a lot of advertising to get new patients,” says Seifert. “We just have to keep doing good work.”

Continuing to excel
As a Breast Imaging Center of Excellence, Elizabeth Wende Breast Care remains committed to advancing the cause of breast health.

They continue to achieve visibility by reaching out to women through public events like Free Mammograms for Uninsured. “It’s difficult to get uninsured women to come in. We need to make sure everything is managed in a seamless way once they get here – or they’ll just leave,” says Wade.

They continue work with companies like Philips Healthcare to test and study exciting new technologies. Dr. Seifert is already contemplating new potentials for elastography. She suggests, “With minimally invasive therapies becoming the norm, I think techniques like elastography may benefit from a tie-in with CAD, to help guide the treatment of breast tumors. Instead of turning to surgery – it may help assess tumor margins to an extent that would allow for a vacuuming out of the tumor.”

And they continue to put their patients’ health at the forefront of these collective efforts. “Certainly this is an exciting time in breast cancer treatment,” concludes Destounis. “As more tools become available, we’ll use them. We’ll get the most accurate diagnosis. And we’ll get the right answer for our patients.”

“I find the elastography measurement is more precise and accurate than MRI, 2D ultrasound, or even mammographic measurements.”
Stamatia Destounis, MD, Breast Imaging Specialist, EWBC

Please visit www.philips.com/iU22