

Van Wert County Hospital Medical Imaging is now providing two powerful weapons in the war against breast cancer. These new modalities are Breast Specific Gamma Imaging (BSGI) and Digital Mammography. The newer innovative technology to detect breast cancer after a questionable mammogram, Breast-Specific Gamma Imaging (BSGI) with the Dilon 6800 Gamma Camera is clearly a step ahead in early detection with VWCH having one of only two units in the state of Ohio. BSGI, a molecular breast imaging technique, is now available to help your physician detect early stage cancers especially and even in dense breast tissue.

While mammography and ultrasound are the industry standard for evaluating the anatomy of the breast, neither studies how the breast actually functions. Mammograms may be difficult to interpret if the breast tissue is dense or scarring from a previous surgery obstructs the view and certainly if implants are present. In these cases and others, additional testing is often necessary, including ultrasound, MRI or BSGI. Mammography remains a highly sensitive screening tool and the initial exam of choice, because it is very effective in detecting breast abnormalities. However, higher breast density lowers this sensitivity and, in some cases, mammography provides low specificity (the ability to determine the nature of a suspicious area) as evidenced by the high rate of abnormalities that appear to be cancer, but turn out to be normal.

Breast-Specific Gamma Imaging (BSGI) uses a proven imaging technique, Nuclear Medicine Imaging in a new way, with a new machine designed for use with the breast. The patient receives a small injection of a radioactive tracing agent which, because of a faster metabolic rate in cancerous cells in the breast, a greater amount of the tracing agent is absorbed than by normal, healthy cells. The tracing agent highlights these cancerous cells as “hot spots.” The Dilon 6800 Gamma Camera is a high-resolution compact gamma camera that detects these “hot spots”. BSGI takes about 45 minutes to perform. Because there is no compression of the breast and patients are seated throughout the entire procedure, the examination is quite comfortable.

Physicians need the best detail possible and the most accurate procedure when mammograms and ultrasound are unable to provide the answers. A BSGI test satisfies that particular need. Eric Jelinger, MD, Radiology/Imaging Medical Director at Van Wert County Hospital, states, “BSGI is as sensitive as MRI, but it is much more specific. For our patients with dense breasts and a strong family history of breast cancer, BSGI gives physicians confidence in saying this patient does not have breast cancer. Even though mammography still remains a primary screening method, when we encounter a challenging breast case, we can count on BSGI to deliver accurate, fast results.”

BSGI has demonstrated a high sensitivity by identifying early stage cancers, as small as 3 mm, and has consistently provided a specificity of 90 percent, significantly helping to differentiate between benign and malignant lesions. BSGI has a 98 percent negative predictive value. This translates into being 98 percent assured that there is no breast cancer.

“We’re excited to bring BSGI to our patients because we firmly believe it fills an important need in our area.” noted Teresa Bloomfield, Director of Medical Imaging at Van Wert County Hospital. With BSGI, physicians can see what matters at nearly one-third the cost of a MRI procedure. Mammography and breast MRI can leave nagging questions that may require a 6-month wait to determine if a questionable area changes. With BSGI, that waiting period can often be eliminated. Instead of 1,000 MRI images, there are 4 to 6 BSGI images taken in the same projections as mammography that correlate very well when deciding if a biopsy is necessary. Bloomfield also noted, “Ultimately, we believe BSGI will translate into earlier detection and treatment of breast cancer.”

Van Wert County Hospital is proud to have one of only two BSGI Imaging systems in the state of Ohio. Mark Minick, President and CEO at Van Wert Hospital, was pleased to announce the acquisition of the Dilon 6800. “This technology allows us the ability to continue the tradition of serving our community with the best diagnostic tools available. Our patients can now have the most timely testing and surgical procedures performed close to home, with ease and convenience.”

Van Wert County Hospital Medical Imaging is also pleased to introduce Digital Mammography. Digital Mammography changes the way radiologists can see the breast image. Just as digital cameras have revolutionized the world of photography, so too Digital Mammography has dramatically changed the images as well as the process for obtaining breast radiographs. With the click of a mouse, the radiologist can enlarge and enhance a single digital image, adjust the contrast, or zoom in on specific areas. This technology means it’s less likely a patient would need to come back for a second test.

Ask your physician about the benefits BSGI testing could have for your specific health condition. For more information about the BSGI test or Digital Mammography, please contact Van Wert County Hospital Medical Imaging Department at (419) 238-8630 or visit www.vanwerthospital.org