# 3D Breast Tomosynthesis

3D breast tomosynthesis, also called 3D mammography, is an imaging system in which the X-ray tube moves in an arc over the breast during the exposure. It creates multiple images of very thin sections of the breast, allowing our radiologists to see greater detail. Industry studies have shown that this system increases detection of invasive cancers by 41%, and decreases false positive callbacks by as much as 40%. Also, because 2D images are generated directly from the 3D images, there is no need for additional scans, reducing overall radiation dose by up to 40%.

As of January 1, 2017, all Connecticut insurance plans with preventative benefits must cover 3D tomosynthesis screening charges. If you have a deductible, coinsurance, or co-pay, these may apply. Please contact your insurance carrier for more specific information.



# Screening and Diagnostic Mammography

A mammogram is an X-ray examination of the breast. The exam can spot breast cancer in its earliest stages—even before you or your doctor can detect a lump.

There are two types of mammography—screening and diagnostic. A screening mammogram is performed annually, when a woman has had no symptoms and does not have a personal history of breast cancer. Diagnostic mammograms are used to follow up on known problems or to clarify the results of a screening mammogram.

Who should have screening mammograms? The Society of Breast Imaging and the American College of Radiology both offer the following guidelines to women:

- Women age 40 and above should have an annual mammogram
- Women with a family history of breast cancer or who have had breast cancer themselves should consult with their doctor about the need for more frequent or earlier mammography
- You should report symptoms such as lumps, nipple discharge, and persistent discomfort to your physician immediately

#### **Computer-Aided Detection**

Advanced Radiology uses the ImageChecker Computer-Aided Detection (CAD) system, which serves as a "second look," and assists the radiologist in minimizing false negative results. Studies show that using ImageChecker can result in earlier detection of more than 23% of cancers currently detected with screening mammography.

Fairfield 1055 Post Road

Orange 297 Boston Post Road

Shelton 4 Corporate Drive

Stamford 1259 East Main Street

Stratford 2876 Main Street

Trumbull 15 Corporate Drive

Wilton 30 Danbury Road

## Women's Imaging

**3D Breast Tomosynthesis** 

Digital Mammography

**Breast Ultrasound** 

**Breast MRI** 

Bone Densitometry

**Vein Treatments** 



203.337.XRAY (9729) AdRad.com











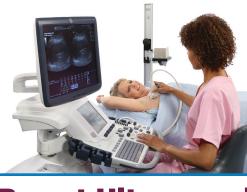








© 2017 Advanced Radiology Consultants



### **Breast Ultrasound**

#### **HOW IT WORKS:**

Ultrasound uses high-frequency sound waves to generate images of the internal structures of the breast, and is based on the same principles involved in sonar.

#### WHAT IT IS USED FOR:

Breast ultrasound is frequently used to evaluate an area of concern found during a mammogram. This exam is also used as a screening supplement for dense breast tissue. The state of Connecticut mandates that this use is covered by insurance. If you have a deductible, co-insurance, or co-pay, these may apply. Please contact your insurance carrier for more specific information.

#### WHAT YOU EXPERIENCE:

You will lie on your back on the examining table and may be asked to raise your arm above your head. The technologist will apply gel on the skin of the area to be examined. The transducer is moved back and forth over the area of interest until the desired images are captured. There is usually no discomfort. The ultrasound image is immediately visible on a video display screen that looks like a computer monitor.

When the exam is complete, usually within 30 minutes, the clear gel will be wiped off. Any gel that is not removed will dry to a powder. Ultrasound gel will not stain or discolor clothing.



## **Breast MRI**

#### **HOW IT WORKS:**

Magnetic Resonance Imaging (MRI) uses radio waves and a powerful magnetic field, combined with digital computations, to produce detailed images of your body's internal structures. Unlike X-ray or CT scans, MRI uses no radiation.

#### WHAT IT IS USED FOR:

Breast MRI is primarily used to supplement mammography or ultrasound. It may be used to screen women at high risk for breast cancer, to further evaluate irregularities seen on mammography, or to evaluate breast implants.

#### WHAT YOU EXPERIENCE:

You will be positioned on the moveable exam table. Cushions may be used to maintain correct positions during imaging. Most MRI exams require intravenous contrast material. When the contrast is injected, you may feel coolness and a flushing sensation.

MRI scanners are air conditioned and well lit, and produce loud noises during imaging. MRI exams are painless, however, some patients may experience a sense of claustrophobia.

Imaging sessions last about one hour. If you have not been sedated, no recovery period is necessary.



# **DEXA Bone Densitometry**

#### **HOW IT WORKS:**

Dual-Energy X-ray Absorptiometry, (DEXA), uses small doses of ionizing radiation to create images of internal body structures to measure bone loss. The device delivers a low-dose X-ray beam with two distinct energy peaks, one absorbed by soft tissue, the other by bone. A computer subtracts the soft tissue information, leaving only the bone density measurement.

#### WHAT IT IS USED FOR:

DEXA is the most accurate method for diagnosing osteoporosis, and is the established standard for measuring bone mineral density (BMD). It is commonly used to track the treatment of conditions that cause bone loss, and assess a patient's risk for developing fractures.

#### **WHAT YOU EXPERIENCE:**

The DEXA device has a large, padded table with a detector arm suspended overhead. While the detector is slowly passed over you, you must remain very still, and may be asked to hold your breath briefly during the exam to ensure clear images. DEXA exams usually last 10 to 30 minutes



## Sclerotherapy Vein Treatment

#### **HOW IT WORKS:**

In sclerotherapy, a solution is injected directly into the affected veins, causing them to close, shrink, and disappear.

#### WHAT IT IS USED FOR:

Treatments are used to improve the cosmetic appearance of spider veins in the legs, and relieve related symptoms such as aching, burning, swelling and cramping.

#### WHAT YOU EXPERIENCE:

Your radiologist will inject sclerosing solution into the varicose and/or spider veins. During the procedure you will feel small needle sticks and possibly a mild burning sensation. The number of veins treated in one session varies, depending upon their size and location.

The procedure is usually completed within 30 to 45 minutes. After the treatment you will be instructed to wear compression hose to support the treated veins. Bruising may occur around the injection site.

In general, spider veins disappear within three to six weeks. If the treated veins respond well, they will not reappear. Your radiologist will inform you of the success of the procedure when it is completed, and may recommend a follow-up visit.

7 Advanced Radiology Consultants