

Akumin Women's Imaging Centers

Breast Imaging FAQ's: Mammography

When should I start doing self-breast exams?

It is recommended to start doing self-breast exams around age 20. The exam should be performed on a monthly basis, approximately 3 to 5 days after menstruation begins.

What is a 3D Mammogram?

Mammography is a specific type of imaging that uses a low-dose X-ray system to examine breasts. It is very helpful in finding tumors before they grow big enough to spread further.

A 3D mammogram is the FDA-approved modern technology that captures X-rays or multiple images of breast tissue to re-form a 3-dimensional image of the breast. It is often called breast tomosynthesis. Unlike traditional mammography that captures only a single image, a 3D mammogram is more effective in breast cancer diagnosis and treatment due to its ability to take multiple 3D breast images. A 3D mammography produces around 200-300 images, compared to just four obtained from a traditional 2D mammogram. These images provide radiologists with a clear image of the breast masses, making it easier to diagnose breast cancer.

Akumin proudly offers the Hologic® 3D Mammography™ system in many of its imaging centers. The Genius 3D Mammography exam finds 20%-65% more invasive breast cancers compared to 2D alone. It also reduces call-backs by up to 40% compared to 2D alone.

Please consult your physician for a full list of benefits and risks associated with mammography.

How should I prepare for a 3D Mammogram?

1. Bring all records and reports related to any previous mammograms, biopsies, or other breast-related treatments you have undergone previously. This will allow the radiologist to compare the old images with the new ones.
2. Avoid scheduling your appointment for the week prior to when your period starts. During this time, your breasts may be swollen or tender and could make the exam physically uncomfortable.
3. On the day of the appointment, avoid using antiperspirant or deodorant as these usually contain substances that may appear on the images as white spots.
4. Wear a casual and comfy outfit such as a loose skirt or pants, so that you'll just need to remove your bra and top for the mammogram.
5. Discuss any recent changes or issues, in your breasts with the technologist before the start of your mammogram.
6. There is no need to fast before a 3D mammogram.

To get a high-quality picture, your breast must be flattened. The technologist places your breast on the machine's plate. The plastic upper plate is lowered to compress your breast for a few seconds while the technologist takes a picture. You will then need to change the position before the next picture is taken.

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How should I prepare for a 3D Mammogram?

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The whole procedure takes about 15 minutes. The actual breast compression only lasts a few seconds each time.

You might feel some discomfort when your breasts are compressed, and for some women, it can be painful. Tell the technologist if it hurts.

Two views of each breast are taken for a screening mammogram. But for some women, such as those with breast implants or large breasts, more pictures may be needed.

When is a 3D Mammography recommended?

A 3D mammogram is usually recommended for women having dense breast tissues. Studies show that about 50 percent of women have dense tissues. Breast tissue is made up of milk glands, ducts, supportive tissue (dense tissue), and fatty tissues. Dense breasts contain a higher quantity of dense breast tissue than fatty tissue. Both cancers and dense breast tissue seem white on a 2D mammogram, which makes it difficult for physicians to distinguish tissues from the tumors.

What are the benefits of a 3D Mammogram?

ACCURATE DIAGNOSIS

By curtailing the impression of overlapping breast tissue, the 3D mammography makes a tumor easier to view. Reviewing numerous images has facilitated doctors to detect more cancers than with 2D images alone.

EARLIER DETECTION

Overlapping tissue often obscures small cancers in a 2D mammogram. With 3D mammography, the image slices can easily be examined sequentially. This makes it possible for 3D mammography to detect cancers in its earlier stages.

REVIEW OF DENSE BREAST TISSUES

Dense breast tissue, usually found in younger females, can appear in shadows because of overlapping tissue, hiding the tumors in 2D mammography. 3D mammography captures pictures of the breast from several angles, thereby giving a cutting-edge look through and around the breast tissue.

PEACE OF MIND

3D mammography greatly helps decrease false alarms. The enhanced accuracy in diagnosing irregular structures given by a 3D view of the breast cuts the number of needless callbacks to women for more additional mammographic views and biopsies.

SAFE, COMFORTABLE AND EFFECTIVE PROCESS

During a 3D mammogram process, women experience a negligible amount of radiation, compared with a 2D mammogram. This dose is less than the FDA-regulated limit for mammography, and no additional risk from the amount of radiation used has been shown. The FDA examined the radiation dose before sanctioning screening and diagnostic via 3D mammography, suggesting that the benefits outweigh any potential risk.

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Breast Imaging FAQ's: Ultrasound

What is an ultrasound?

Diagnostic ultrasound is an established method of diagnostic medical imaging using a high-frequency sound wave and the principle of sonar to create an image. It is a reliable, cost-effective means of evaluating many internal organs, including the liver, pancreas, spleen, kidneys, aorta, gallbladder, ovaries, uterus, prostate, testicles, and thyroid. It is routinely used to evaluate fetal growth and complications of pregnancy.

Since ultrasound images are captured in real-time, they can show movement of internal tissues and organs, and enable physicians to see blood flow and heart valve functions. This can help to diagnose a variety of heart conditions and to assess damage after a heart attack or other illness.

Diagnostic ultrasound is very patient friendly — there are no injections, it does not use ionizing radiation (or x-rays), and the ultrasonic waves cause no damage to human tissues. This type of test is therefore considered a very safe imaging technique and is an important tool utilized for both diagnosis and treatment of disease.

How should I prepare for an ultrasound?

Because the preparation for an ultrasound may vary based on the exam, the facility will notify you of any necessary preparation prior to your approval. You can also visit our online exam prep link at www.akumin.com/exam-prep for more details.

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Breast Imaging FAQ's: DEXA

What is a DEXA scan?

Bone density scanning, also called dual-energy X-ray absorptiometry (DEXA) or bone densitometry, is an enhanced form of X-ray technology that is used to measure bone loss. It can also be used to determine body composition, as it can measure the percentage of the body's lean muscle and fat. The most common purpose, however, is to evaluate if a person's bones are weak, likely to fracture, or if they have osteoporosis.

When determining if a patient has a low bone density or the condition is becoming worse, a DEXA scan is generally more accurate than an ordinary X-ray, since it can spot even minor changes in bone loss. This DEXA scan is most often performed on the lower spine and hips whereby low-energy x-rays are directed through the bone to measure its mineral density. Mineral density is an accurate predictor of bone strength. The results of this test are commonly used to diagnose osteoporosis and to assess an individual's risk for developing fractures.

How is a DEXA scan performed?

The technician positions the patient on the table and may put a wedge under their knees to help flatten their spine for the picture, or to help position their hip correctly. The arms are often also positioned for scanning. The patient is asked to hold very still while the imaging arm above gradually passes across their body. The level of X-ray radiation is low enough to let the technician stay in the room with the patient while the scan is performed. The whole procedure takes only a few minutes.

How should I prepare for a DEXA?

A person can eat and drink as usual on the day of the DEXA procedure. However, if taking calcium supplements, it is recommended to stop taking them at least 24 hours before the DEXA scan. Prior to the exam, patients are given a gown and asked to remove all metal objects such as jewelry, belts or underwired garments, and eyeglasses.