

Breast Density: My mammogram States I have Dense Breasts

Beginning April 1, 2013, a California law required that all women receive notification when their mammograms show dense breasts. This has led many patients to question what it means and what they should do.

While learning one has dense breasts may at first be confusing, notification empowers women. Dense breasts have been described as “the greatest breast cancer risk you’ve never heard of.” Recent studies show that women with dense breasts have a three to six times higher risk of breast cancer.

Understandably, when a woman is told she has dense breasts, this news may be alarming for her. But as women seek and gain more information about their density issues, they can make better informed decisions. Breast cancers may be detected earlier and more lives may be saved.

What are dense breasts?

Breasts are composed of dense tissue (glandular and fibrous) and fatty tissue. Dense breasts have less fatty tissue. About 50% of women have dense breasts. Regardless of size and shape, breasts that are dense have a higher risk of developing breast cancer than those that are classified as fatty.

How is breast density determined?

Breast density is determined during your mammogram. It cannot be accurately determined by a breast examination. There are four levels of breast density:

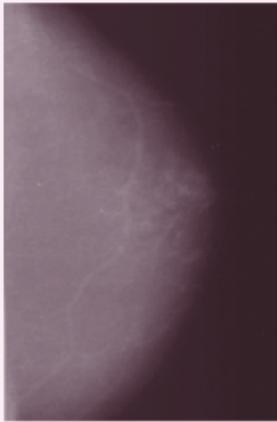
- Fatty
- Scattered fibroglandular
- Heterogeneously dense
- Extremely dense

California women receiving a mammogram are informed if they have extremely dense or heterogeneously dense breasts.

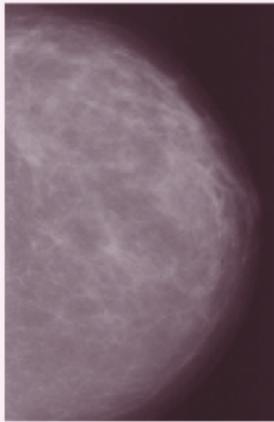
How does breast density affect screening?

Although mammogram remains the gold standard for breast cancer screening and diagnosis, screening mammograms miss about 20% of breast cancers, largely due to high breast density. Both breast tumors and dense breasts look white on mammogram. Fatty breasts show up mostly black, so tumors stand out.

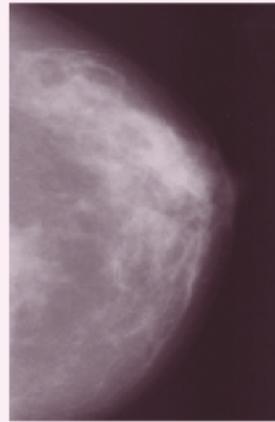
These mammography images show varying breast density ranging from breasts with more fat and less breast tissue to images with less fat and more breast tissue.



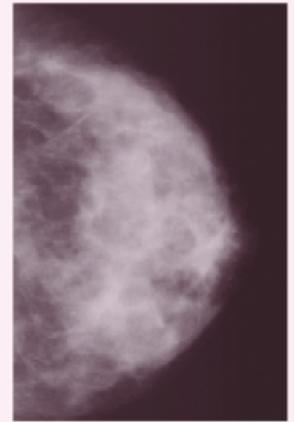
Fatty breast



Some breast density



More breast density



Dense breast

Which imaging study is best?

For women with dense breasts and normal mammogram, there are highly sensitive additional imaging studies available:

- Ultrasound
- Magnetic Resonance Imaging (MRI)
- Tomosynthesis

The study chosen will depend on a woman's personal risk and her personal preference.

Unfortunately, most insurance plans do not cover additional imaging in women with low or medium risk. Cost may be an important consideration for women seeking further screening. Thus, the less expensive and noninvasive ultrasound screening is often the procedure of choice.

Because MRI has the best record for detecting cancers missed on mammogram, women with high risk or those with serious concerns about their risk of breast cancer may opt for an MRI imaging study. For high-risk women, annual MRI studies are covered by most insurance plans.

Digital tomosynthesis provides multiple three dimensional pictures of the breast from numerous angles using X-rays. While promising, it is relatively new and not yet considered the standard of care for breast cancer screening.

FDA Approved first breast ultrasound imaging system for dense breast tissue

September 2012

In September 2012, the U.S. Food and Drug Administration approved the first ultrasound device for use in combination with a standard mammogram in women who have a negative mammogram and no symptoms of breast cancer.

The somo-v Automated Breast Ultrasound System (ABUS) has a specially shaped transducer that can automatically scan the entire breast in about 1 minute to produce several images for review. As part of the approval process, the FDA reviewed results from a clinical study in which board certified radiologists were asked to review mammograms alone or in conjunction with the somo-v ABUS images for 200 women with dense breasts and negative mammograms.

Biopsies were performed on masses detected with the somo-v ABUS to determine if they were cancer. The results showed a statistically significant increase in breast cancer detection when ABUS images were reviewed in conjunction with mammogram, as compared to mammogram alone.

The somo-v ABUS is approved for use in women who have not had previous clinical breast intervention, such as a surgery or biopsy, since this may alter the appearance of breast tissue in an ultrasound image.

Breastlink in Orange, CA acquired Orange County's first somo-v ABUS. If you are interested in this screening technique, please make an appointment to see if this would be an option for you. I will meet with you for a detailed personal analysis of risk and treatment options. If you meet the criteria, we would be happy to refer you for ultrasound screening with the somo-v ABUS. If it is not covered by insurance, you can expect to pay approximately \$250.