



HOAG'S ADVANCED 3D BREAST SCREENING

SEE WHAT OTHERS MAY BE MISSING

Are you dense?

There has been much discussion, as well as some confusion, related to breast density and what it means for your breast health. As your partner in breast care, Hoag Breast Center is here to provide information and guidance related to breast density and the steps you should take for your breast health.

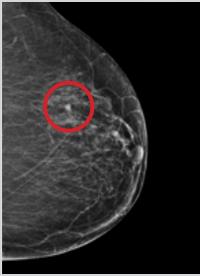
Dense Breasts Defined

Breast density is not based on family history and often cannot be predicted by the look and feel of the breasts. It is determined by the relative contributions of fat versus fibroglandular tissue (dense tissue) which comprise the breasts. Younger women typically have dense breast tissue and the density generally decreases with age. However, some women's breasts always remain dense, even in their later years. Approximately 40 percent of women have radiographically dense breast tissue.

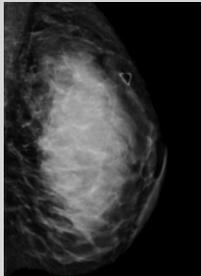
Why Breast Density Matters

- Women with dense breasts have a greater risk of developing breast cancer than women with fatty breasts.
- Dense breast tissue can mask a cancer on a conventional mammogram, or mimic a cancer when none exists because they both appear white on film. Although mammography remains the gold standard for breast screening, in women with dense breasts, cancers can be missed.

Fatty vs Dense Breast Mammogram



1cm cancer visible because fatty tissue appears black.



9cm cancer invisible because dense tissue appears white, same as tumors.

How can I find out if my breasts are dense?

In California, radiologists are required by law to inform women if they have "dense breasts." Following a screening mammogram, women receive a results letter that includes a sentence informing her if she has dense breasts.

What if I have dense breasts? How can Hoag help me?

If your mammogram report reveals you have dense breast tissue or your physician informs you, Hoag Breast Center offers industry leading technology that was designed specifically for women with dense breasts. These technologies include:

- Breast Tomosynthesis (3D Mammography)
- Breast Screening Ultrasound
- Breast MRI

What is Breast Tomosynthesis?

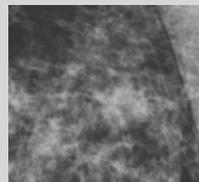
Breast Tomosynthesis (3D Mammography), was specifically designed to address the limitations of conventional 2D Mammography in dense breasts. Breast Tomosynthesis can be thought of as a 3D exam since it allows radiologists to examine the breast tissue one layer at a time. Instead of viewing all the complexities of breast tissue in a single flat image, the radiologist can examine the tissue one millimeter at a time. Fine details become more visible and are no longer hidden by superimposed breast tissue.

Clinical trials have shown that Breast Tomosynthesis finds up to 40 percent more invasive cancers than traditional 2D Mammography, while lowering the likelihood of a call-back for additional imaging for a finding that turns out not to be cancer.

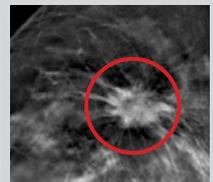
Do all hospitals or breast care centers offer Tomosynthesis?

No. Hoag Breast Center was one of 11 test sites nationwide chosen to participate in the clinical trial of Breast Tomosynthesis, which ultimately resulted in FDA approval of the technology in 2011.

Mammogram Comparison



Standard 2D Mammography (cancer is hidden)



Tomosynthesis 3D Mammography (cancer is now visible)

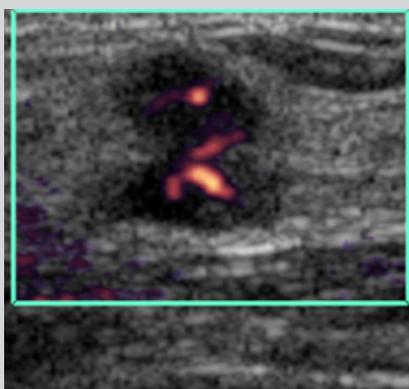
Hoag was the first hospital in California to provide Tomosynthesis and years later remains a technology leader offering this advanced imaging modality at all Hoag breast imaging sites as part of its comprehensive breast imaging services.

What is Breast Screening Ultrasound?

It is a supplementary exam of both breasts that can find small cancers that mammography can miss. It is not a replacement for mammography; the combination of the two studies has been shown to improve breast cancer detection.

The image below represents an 8mm cancer which was detected on an screening ultrasound, not a mammogram.

Breast Screening Ultrasound



8mm cancer which was not detected on a mammogram.

What can I expect during the screening ultrasound examination?

A screening ultrasound exam is painless and usually takes 15 to 20 minutes. There is no compression, radiation or injection to the breast. The exam is performed by one of our highly trained breast imaging technologists who carefully documents images of any relevant findings in the breast. These images are then reviewed by one of Hoag's expertly trained, dedicated breast radiologists, and a detailed report is provided to your referring physician.

Why is screening ultrasound beneficial for women with dense breast tissue?

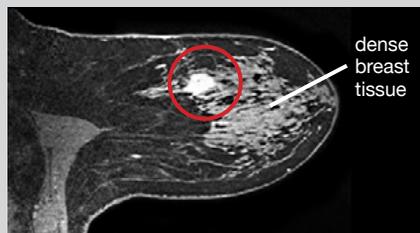
On conventional mammograms, tumors and dense breast tissue both appear white, making it easy for tumors to hide. With screening ultrasound, cancers appear dark against the white background of dense breast tissue, making the cancer more visible. At Hoag Breast Center, you can have your annual screening mammogram and screening ultrasound the same day.

What is Breast MRI?

For women at high risk for breast cancer, such as those with a strong family and/or personal history of breast cancer, those with a known breast cancer associated gene mutation, or previous radiation therapy to the chest, Breast MRI is the exam of choice for supplementary screening in addition to mammography.

Breast MRI is a noninvasive test that uses a powerful magnetic field to produce images of both breasts, and the lymph nodes in the axillary regions. For women with breast implants, breast MRI has the added benefit of detecting unexpected leakage of silicone implants, which cannot be reliably assessed with mammography or ultrasound. For women having screening MRI, there is no added benefit from screening ultrasound.

Breast MRI



MRI showing a breast cancer that was completely obscured by dense breast tissue on mammography.

What can I expect during the MRI examination?

Breast MRI is painless and usually takes 20 to 30 minutes. It does not involve exposure to radiation, but does require an intravenous injection of contrast material. The contrast dye enhances detection of breast cancer in two ways: (1) allows better visualization of tumors, and (2) identifies alterations in blood flow patterns that can be indicators of breast cancer.

Which Hoag locations provide advanced breast screening technologies?

Breast Tomosynthesis (3D Mammography):

Aliso Viejo
Costa Mesa
Huntington Beach
Irvine (Sand Canyon and Woodbridge)
Newport Beach

Breast Screening Ultrasound:

Huntington Beach
Irvine (Sand Canyon)
Newport Beach

Breast MRI:

Huntington Beach
Irvine (Sand Canyon)
Newport Beach

Why choose Hoag Breast Center?

- Hoag Breast Center is the first and only breast center in Orange County to be designated as a Certified Quality Breast Center of Excellence™ by the National Consortium of Breast Centers.
- Hoag Breast Center physicians are nationally recognized experts in their field.
- Hoag Breast Center is the largest (by volume) breast center in Orange County and among the largest in the Western U.S.
- Hoag Breast Center performs almost 50,000 mammograms a year and diagnoses nearly 700 breast cancers annually.
- Hoag Breast Center was the first center in California to offer Breast Tomosynthesis (3D Mammography).
- Hoag Breast Center was the first center in Orange County with a dedicated breast MRI.
- Hoag Breast Center was the first center in Orange County to offer oncoplastic surgery.
- Hoag Breast Center was the first center in Orange County to perform Intraoperative Radiation Therapy (IORT).

