Understanding breast imaging begins with understanding your breasts

Let's start with the breast basics. Your breasts have fatty tissue and dense tissue. Different women have different ratios of fatty to dense tissue in their breasts, though in general, breasts become less dense with age. Over 40% of women have dense breasts – a high proportion of dense breast tissue which can be a factor increasing a woman's risk of breast cancer.

A typical breast cancer screening begins with a standard mammogram, which may be followed up with an ultrasound if the doctor decides on the need to investigate further. Depending on different factors, such as your fat to dense tissue ratio in your breasts, the accuracy of these first line techniques may differ and results may be considered abnormal.

Following this primary workup, further testing might be needed to get a clearer picture.

DISCLAIMER

Contrast-Enhanced Spectral Mammography (CESM) is a prescription medical device that is limited to sale, distribution, or use, to or on the order of a physician. The medical risks of any mammography including CESM are radiation exposure, minor bruising or tearing of the skin. CESM requires the injection of an iodinated contrast agent which could cause mild to severe adverse reactions in some patients that could include, but are not limited to itching, hives, nasal congestion, and swelling about the eyes and face. In extreme cases more severe reactions can occur.

The use of contrast agents should be determined on an individual basis according to the clinical circumstances of each patient and the decision to use a contrast agent must be made according to the best judgment of the physician in charge of the examination. Please review the risk information with your doctor.

Each year in the US, 5-11% of women who undergo routine mammograms are called back in for further testing because of abnormal results. Research has shown that the anxiety a woman experiences while she waits for more testing can have long-term effects.

BREAST ULTRASOUND

A breast ultrasound is often used after abnormal mammogram results, to show whether a lump is a fluid-filled cyst or a solid mass.

In an ultrasound image, fluid appears as black, while tissue appears as gray. The denser the tissue, the lighter gray it will appear. If the ultrasound shows a solid mass, further testing is needed to determine its cause.

HOW DOES CESM WORK?

The exam is very much like a standard mammogram. The main difference is that the exam begins with the injection of an iodine-based contrast agent, which makes any areas of increased blood supply more visible in the x-ray. Because cancer cells stimulate the development of new blood vessels, these areas may indicate that cancer is present.

Your radiologist can view the resulting images almost immediately, and make informed decisions quickly and confidently.

Contrast-Enhanced Spectral Mammography is a technology that is designed to help your doctor spot breast cancer quickly and confidently. And it’s almost as simple as a traditional mammogram.

CESM is accessible to women who might face barriers to other diagnostic tests.

Cost
CESM may cost the same as a diagnostic mammogram, plus the cost of the contrast injection depending on the facility.

Scheduling
CESM is a quick test, available soon after an abnormal mammogram.

Physical constraints
CESM uses standard mammography equipment, so your exam experience will be very similar to what you’re used to.

Preparing yourself is simple
As with a regular mammogram, you should avoid wearing deodorant, perfume, or lotion under your arms. And you may want to wear a separate top and bottoms, so that you only need to remove your top.

With CESM, the level of detail compared to a regular mammogram gave me such easing of my worries. It makes a big, big difference to know what’s happening and why. Liz S, breast cancer patient