

GETTING A MAMMOGRAM can be a little unnerving, especially when you consider that mammography may miss about 20 percent of all breast cancer cases and almost 30 percent in women with dense breasts. And roughly 50 percent of women have dense breasts, “which look like white splotchy snowstorms on a mammogram,” says Kristi Funk, a breast cancer surgeon and a founder and medical director of the Pink Lotus Breast Center in Los Angeles (you may remember her as the doctor Angelina Jolie chose to perform her preventative double mastectomy). “And how do you find a snowball in a snowstorm?”

Contrast-enhanced spectral mammography (CESM) may be the answer. Never heard of it? That’s because not many places offer it, although experts like Funk, whose clinic was the first in the country to provide CESM testing, hope that changes, as it’s proving to be a highly effective screening tool for women with dense breasts as well as for those with inconclusive regular mammograms.

WHAT IS CESM? To understand CESM, it helps to group breast-cancer screening tests into anatomical versus functional ones. Mammography and ultrasound fall into the former category, as they simply take pictures of the shape of tissues, which may not be all that revealing. “Cancerous tissue tends to be more metabolically active than benign abnormalities and normal breast tissue,” says Bruce F. Schroeder, medical director of Carolina Breast Imaging Specialists in Greenville, North Carolina, though he notes that there may be some exceptions. “While mammography and ultrasound may give us a hint about what’s going on in the tissues, showing us representations of the tissue, neither tells us what is active or inactive.”

That’s why some women, especially those with a family history of breast cancer, not only undergo mammography but also magnetic resonance imaging (MRI), the most common functional imaging test. With an MRI, a contrast agent is given through an IV to reveal where blood in the tissue is flowing. “Because active cancer tissues need more food and oxygen, they use more blood,” Schroeder says.

Although MRI is effective, it has its drawbacks, one being that it can lead to false positives. “It’s good at finding things that may not be cancer but still require evaluation, either through another modality or a biopsy,” says Schroeder, adding that MRIs are also expensive and results aren’t immediate. Not to mention that you



A BETTER MAMMOGRAM?

Bazaar investigates a promising new breast-cancer screening test that yields clearer results. By Karen Asp

have to time the MRI to your period and stop hormone replacement several weeks prior to the test.

Enter CESM, which was cleared by the FDA in 2011 for women who have inconclusive mammograms and ultrasounds, and essentially serves as an alternative to MRI. (It’s also a better option than MRI if you’re a large individual, are claustrophobic, or have a pacemaker, adds Schroeder.) Like MRI, CESM requires an IV contrast agent, in this case iodine-based. The images then reveal where blood flow is being directed, but unlike an MRI, can easily be done on the day of a mammography. And studies show CESM’s effectiveness. “When it comes to detecting breast cancer in women with dense breasts, CESM is more sensitive than mammography and ultrasound, and appears to be just as sensitive as MRI,” says Fiona Gilbert, a professor of radiology at the U.K.’s University of Cambridge,

who is studying the efficacy of CESM. “Compared to MRI, it may have better specificity, thus reducing false positives.”

As with any screening, CESM does have downsides, including that some women aren’t able to get the exam because of an iodine allergy, which Funk says is rare. The bottom line? “CESM is superior at detecting cancer in that snowstorm, and because patients receive immediate results, there’s greater peace of mind,” she says.

WHY CESM ISN’T MAINSTREAM CESM providers are few and far between, largely because medical practices that have already spent millions of dollars on MRI equipment may not be willing to make another financial investment. “In order for that to happen, more studies need to conclude that CESM is by far the winner over other screening tools,” says Funk. There are currently about 100 CESM units being used in the U.S. and Canada. (Find locations at SenoBright.com.) Plus, the procedure isn’t always covered by insurance—ironic considering that an MRI costs up to 10 times as much as a mammogram, while CESM is only about two to three times the price. Schroeder and Funk both invested in CESM, however, because they believe that it offers significant benefits. But that doesn’t mean you should go jetting around to get CESM. “You shouldn’t think that the existing screening is entirely inaccurate,” Funk says. “For normal-risk women who don’t have dense breasts, CESM should not be a screening tool.” That’s a view Schroeder shares: “We should be looking at each woman individually and seeing which tests are best suited for her specific needs.” ■