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GW Radiologist Discusses Implications of Breast Density Notification Laws

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MedicalResearch.com Interview with:



Dr. Rachel Brem

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Rachel Brem, MD

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MedicalResearch.com Editor's note: Many states now have laws regarding patient notification of breast density after mammography screening.

Dr. Brem discusses the background and implications of the new mandatory notification laws.

MedicalResearch.com: What is meant by 'breast density?' Is breast density a risk factor for breast cancer? Is breast cancer more difficult to detect in dense breasts?

Dr. Brem: Breast density is a measure used to describe the proportion of fat versus breast tissue, which includes fibrous and glandular tissue. Dense breasts contain more fibrous and glandular tissue and less fatty tissue. This is important because on a mammogram dense breast tissue is white and breast cancer is white. The lack of contrast can make detecting cancer more difficult.

You can only tell if your breasts are dense from the mammogram. You can't feel dense breast tissue or see it.

An estimated 40 percent of women have dense breast tissue that may mask the presence of cancerous tissue in standard mammography. Dense breast tissue decreases with age, but remains important throughout life. Over 75 percent of women in their 40s have dense breast tissue but over a third of women in their 70s have dense breast tissue.

As breast density increases, mammography sensitivity decreases. This is significant, but we must consider the increased risk of breast cancer in women with dense breast tissue. Women with dense breast tissue have up to a four-fold increased risk of developing breast cancer. So, breast density is essentially the "perfect storm" where the ability to detect cancer decreases while the risk for breast cancer increases. Therefore, optimal approaches to individualized breast cancer screening are needed.

MedicalResearch.com: *If a woman has dense breasts, should she have additional screening for breast cancer other than mammography (i.e. ultrasound, tomosynthesis, or MRI)?*

Dr. Brem: Mammograms are still the standard of care for the detection of early curable breast cancer. However, for women with dense breasts additional screening tools may be recommended, such as ultrasound, MRI or breast specific gamma imaging (BSGI).

A growing body of research also continues to support the use of tomosynthesis in breast cancer screening, both for women with dense breasts and non-dense breasts. Tomosynthesis is rapidly being adopted in clinical practice because of its advantages, including decreased call back rates and an increase in cancer detection rates.

MedicalResearch.com: *What is the controversy surrounding patient notification of breast density? Is it confusing to the patient? Is it clear who should get these notifications and what the patient or her primary care provider should do if the patient receives such a notification?*

Dr. Brem: In May, Vermont became the 28th state to pass legislation requiring that women with dense breasts receive dense breast notifications (DBNs) following mammography. DBNs were intended to help women with dense breasts understand their mammography results and risks of developing breast cancer.

While this is a very positive step in women's health, a recent study suggests that some patients may not understand the language used in these DBNs. The study authors also noted that the content of these letters can vary from state to state, the language used exceeds the average American's reading level, and these communications do not always provide clear next-steps for patients who might benefit from additional screening.

Also, some DBNs require that women be informed if additional screening may detect mammographically occult breast cancer, and some only require that women be informed of what their breast density is, without context to what the implications and possible strategies for dense breast tissue are. This study identifies a critical area where the medical community can, and should, improve patient care.

MedicalResearch.com: What recommendations do you have for research on this topic?

Dr. Brem: The medical community must take steps to enhance our communications with patients related to breast density to ensure they understand their risk for developing breast cancer and whether additional screening may be warranted. We must also inform our patients of additional screening modalities that may detect mammographically occult breast cancer. We cannot wait for national legislation to introduce uniform standards for DBNs.

It should be noted that DBNs are intended to initiate a dialogue between patient and doctor, rather than replace it. Radiologists involved in interpretation of mammography are the ones charged with determining breast density. It is our responsibility to communicate these results to patients and their care teams.

MedicalResearch.com: Is there anything else you would like to add?

Dr. Brem: Empowering women to insist on optimizing their health and particularly their breast health is critical, and in fact, is one of the fundamental principles of the Brem Foundation to Defeat Breast Cancer, a cause near and dear to me.

Regardless of how we communicate with our patients about breast density, the bottom line remains that DBNs can only be as effective as the accuracy of the breast density assessment itself. The advent of advanced software programs will help to address the issue of reader variability by providing more consistent breast density assessments that are accurate and reproducible. New technology, such as iCAD's iReveal automated breast density solution, now makes it possible to produce automated, rapid and reproducible assessments of breast density to more precisely identify patients who could benefit from additional screening.

Breast density may be a significant risk factor for breast cancer but better screening technology, consistent breast density assessments and improved DBNs can help women understand their risks and help radiologists detect breast cancer earlier, when it may be more easily treated.

More on Dr. Bern:

The George Washington University Medical Center and Program Leader for Breast Cancer at the George Washington Cancer Center. Dr. Brem is also a founder and chief medical advisor for the Brem Foundation to Defeat Breast Cancer.

Dr. Brem earned her medical degree from Columbia University. She completed her internship in internal medicine at the Sinai Hospital of Baltimore and her residency in radiology at the Johns Hopkins Hospital. She pursued further training in magnetic resonance imaging and breast

imaging as a fellow at the Johns Hopkins Hospital Department of Radiology and Radiological Science.

Dr. Brem has received numerous awards, honors and recognition throughout her career, including being named by Newsweek as a Top Cancer Doctor in 2015, Jewish Women International's, "Ten Women to Watch," and a Top Doctor and Top Cancer Doctor by Castle Connelly since 2005.

Dr. Brem has published in numerous peer-reviewed journals, and abstracts, and has chapters in various books, including "Advances in Radiology & Radiation Oncology" and "Contemporary Diagnostic Radiology." Presently she serves as a reviewer to numerous journals including The Journal of the National Cancer Institute, the American Journal of Roentgenology, The Breast Journal, the Journal of Nuclear Medicine and Radiology.

Some of Dr. Brem's professional memberships include the Maryland Radiologic Society, the Society of Magnetic Resonance Imaging, the American Society of Breast Disease, the Maryland Cancer Registry Advisory Committee, and the American Association for Women Radiologists.

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Citations:

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