Breast Density, Breast Cancer Risk, and North Carolina Breast Density Notification Law 2013-321:

Scenarios for Clinicians

December 2013

My patient received the letter stating she has dense breasts.

Now she is wondering whether she should continue to get mammograms at all.

She *should* continue to get screening mammograms. The breast density law does not reflect any change in the current mammography screening recommendations by professional medical societies.

Mammograms have been shown to be effective in lowering breast cancer mortality for all breast densities.

My patient received the new breast density letter. She is concerned because she now thinks she is at high risk for breast cancer.

Reassure the patient that breast density alone has only a small impact on breast cancer risk.

She wants to know specifically how it changes her risk.

Look up her mammogram report (different from the patient letter).

1. If the report states her density is *heterogeneously dense,* this is associated with minimal risk above average (RR=1.2 compared to average breast density).
2. If her density is *extremely dense,* this factor doubles her risk of breast cancer compared to average density, similar to the risk associated with a family history of unilateral, post-menopausal breast cancer in a mother, sister, or daughter. For example, having *extremely dense* tissue on its own raises the 10-year risk of breast cancer in the average 50 year old woman from 1 in 42 to 1 in 21.

My patient received the new breast density letter.
She wants to be screened with another modality instead of mammograms.

Explain that, at this point in time, there is no other method that is recommended to replace the mammogram. There are certain manifestations of cancer (for example, calcifications) that are only seen on mammography.

My patient received the new breast density letter. She wants to get additional tests to be screened for breast cancer.

Does she have a first degree relative (mother, sister, daughter) who had premenopausal breast or ovarian cancer, or a male relative with breast cancer?

or

Does she have a history of atypia (ADH, ALH) or LCIS on a previous breast biopsy?

YES

She would likely benefit from a breast cancer risk assessment.

This could be performed by a physician with experience in breast cancer risk model selection and interpretation, or by a cancer risk assessment program.

NO

If the patient does not have other breast cancer risk factors, **reassure** her that her risk remains low. **Educate** the patient about the risks and benefits of screening MRI and ultrasound (higher cancer detection, but also higher false positive biopsy rates and short term follow-up recommendations). Many health centers have chosen not to offer screening breast ultrasound, in part because ultrasound depicts many fewer mammographically invisible cancers than does screening MRI. Tomosynthesis is an additional screening test with current results suggesting some increase in cancer detection and decreased false positives.

Explain that at most medical centers, additional screening tests are an out-of-pocket cost for the patient, unless they have been assessed to have high risk. Assist the patient in making the best personal choice to meet her needs based on these factors, using a shared decision making process.

My patient has “heterogeneously dense” or “extremely dense” breasts and she also has other risk factors. She has completed a risk assessment showing her overall risk to be high (e.g. calculated >20% lifetime risk or >5% 10-year risk), or has a BRCA mutation or history of mantle radiation.

Recommend annual breast MRI and annual mammogram for screening.

Screening breast MRI is typically covered by insurance for high-risk women.

If a woman is being screened annually with MRI and mammogram, no additional screening tests (such as ultrasound) are needed.

My patient has “heterogeneously dense” or “extremely dense” breasts and she also has other risk factors. She has completed a risk assessment showing her overall risk to be high (e.g. calculated >20% lifetime risk or >5% 10-year risk).

I recommended an annual MRI, but the patient has either claustrophobia, pacemaker, contrast allergy, limited insurance coverage plan, or other reasons why she does not want to have an MRI.

Recommend screening ultrasound as the second-best supplementary screening test for high risk women. Studies have shown some utility for ultrasound in high risk women *if screening MRI is not performed*.

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