The Value of a **High-Risk Breast Screening Program**

Imaging Healthcare SPECIALISTS

Most women are NOT aware if they have an elevated risk for breast cancer

- Only 1 in 8 women are aware that breast density is a risk factor for breast cancer[1]
- Only 1 in 5 women know that dense breasts reduce mammogram sensitivity[1]
- 1 in 3 breast cancers occur in women over 70, yet 55% of these women are not aware of that fact[2]
- More than 70% of breast cancers occur in women with no family history of the disease
- According to the Breast Cancer Surveillance Consortium, 15% of women undergoing screening mammography have a high-risk for breast cancer, yet only 6.6% of high-risk women obtained a breast MRI screening within a 2-year window of their screening mammogram.[3]
- Breast MRI will detect 30% of all breast cancers that would have been missed with mammography-only screenings.[4]

Why is it important to identify women at high-risk?

- If a woman knows she is at a higher risk, she may be more vigilant and compliant with breast screening recommendations
- Her insurance will cover supplemental screening tests as well as breast screening at an earlier age
- She may qualify for preventive medications (such as Tamoxifen) which are clinically shown to reduce her chances of developing breast cancer
- If she is younger than 40 years of age, she should have an annual mammogram AND a breast MRI starting as early as 30 years of age[5]

IMAGE A

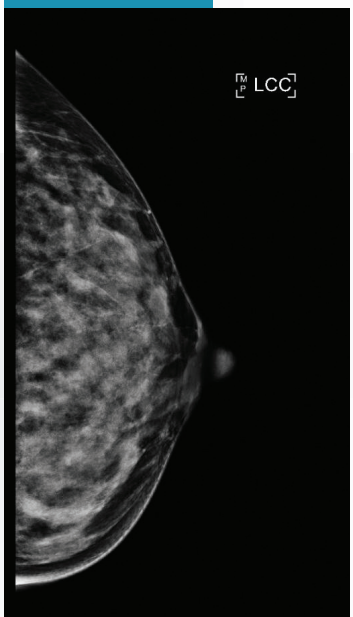

IMAGE B

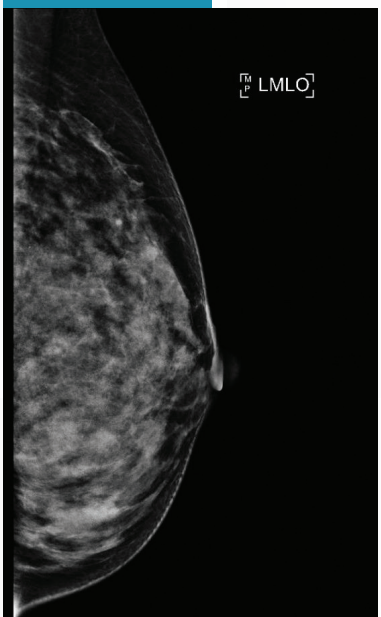

IMAGE C

CASE STUDY

Background

A 45 year-old female patient visited IHS for her screening mammogram. The patient had her first child at 28 years of age. Her mother had breast cancer at age 55, and a maternal aunt had breast cancer after the age of 50 as well.

A 3D screening tomosynthesis with CAD was performed. 2D mammographic and 3D tomographic images were obtained. There were no suspicious findings. (Image A & B) However, the patient's breast tissue was heterogeneously dense, which could obscure the detection of small masses.

Because of the patient's family history and dense breast tissue, an evaluation by IHS High-Risk Assessment program was recommended. The patient returned 3 months after her mammogram to undergo the assessment.

High-Risk Assessment

Using the Tyrer-Cuzick assessment model, the high-risk patient navigator determined the patient's calculated lifetime risk of breast cancer at 34.9%. Annual breast MRI in addition to mammography is recommended in patients with a 20% of greater lifetime risk of breast cancer. The patient agreed to have a breast MRI.

Breast MRI

No suspicious masses were identified in the right breast, but two suspicious masses were identified in the left breast (Image C).

2:00 (middle third depth): 7 x 8 x 8 mm irregular mass with intense initial contrast uptake and predominantly plateau kinetics located 4 cm from the nipple, 1 cm from the skin surface and 4 cm from the chest wall.

3:00 (posterior third depth): 10 x 11 x 12 mm irregular mass with intense initial contrast uptake and washout kinetics located 7 cm from the nipple, 0.7 cm from the skin surface and 1.5 cm from the chest wall.

Biopsy

An ultrasound-guided breast biopsy was subsequently performed, and both sites were positive for invasive ductal carcinoma.

Discussion

- Over 40% of women of mammography age have dense breasts
- Women with dense breasts are up to 6x more likely to develop breast cancer[6]
- Mammography sensitivity declines from 80% to 30% between women with predominantly fat tissue and women with dense breasts[7]
- IHS's high-risk program is a free service designed to give patients and referring physicians the resources they need to achieve early detection
- While a mammogram would likely have identified these masses over time, it is widely agreed that earlier detection is far more advantageous, providing more options for the patient and reducing the need for more aggressive treatments and/or mastectomy.

What is the IHS High-Risk Assessment Program?

This free and comprehensive assessment is performed by our High-Risk Patient Navigator. She will ask questions, answer patient questions, and prepare a report specifically for the referring physician.

If the patient's lifetime risk for breast cancer is greater than 20%, you can engage in joint decision-making with her to help you take the proactive steps necessary, and to ensure that she has access to the full range of screening tests to achieve the earliest possible detection.

Beth Najera, RT is IHS' High-Risk Patient Navigator.

With more than 26 years' experience in women's health, Beth partners with referring physicians to offer the best possible care for patients. She also performs high-risk assessments and facilitates BRCA genetic testing and counseling for patients with a strong family history of breast and ovarian cancer.

For more information about how the Patient Navigator program can assist your practice in achieving early detection for your patients, please contact Beth Najera, at 858-658-6411 or bnajera@imaginghealthcare.com.

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8. Nina Oestreicher Breast Density as a Predictor of Mammographic Detection: Comparison of Interval- and Screen-Detected Cancers Affiliations of authors: M. T. Mandelson, Center for Health Studies, Group Health Cooperative, Seattle, WA, and Department of Epidemiology, University of Washington, Seattle; N. Oestreicher, E. White, Program in Cancer Prevention Research, Division of Public Health Sciences, Fred Hutchinson Cancer Research Center, and Department of Epidemiology, University of Washington; P. L. Porter, Program in Cancer Biology, Divisions of Human Biology and Public Health Sciences, Fred Hutchinson Cancer Research Center, and Department of Pathology, University of Washington; D. White, Department of Radiology, Group Health Cooperative; C. A. Finder, Division of Mammography Quality and Radiation Programs, Food and Drug Administration, Rockville, MD; S. H. Taplin, Center for Health Studies, Group Health Cooperative, and Department of Family Medicine, University of WashingtSearch for other works by this author on: Oxford Academic PubMed Google Scholar Affiliations of authors: M. T. Mandelson, Center for Health Studies, Group Health Cooperative, Seattle, WA, and Department of Epidemiology, University of Washington, Seattle; N. Oestreicher, E. White, Program in Cancer Prevention Research, Division of Public Health Sciences, Fred Hutchinson Cancer Research Center, and Department of Epidemiology, University of Washington; P. L. Porter, Program in Cancer Biology, Divisions of Human Biology and Public Health Sciences, Fred Hutchinson Cancer Research Center, and Department of Pathology, University of Washington; D. White, Department of Radiology, Group Health Cooperative; C. A. Finder, Division of Mammography Quality and Radiation Programs, Food and Drug Administration, Rockville, MD; S. H. Taplin, Center for Health Studies, Group Health Cooperative, and Department of Family Medicine, University of Washington.
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