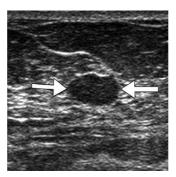


Ultrasound Lags MRI for Supplemental Breast Cancer Screening



Cancer screening of women with dense breast tissue is a subject of great interest to both the medical community and the mass media. In many studies, dense parenchyma has been shown to reduce the sensitivity of mammography to half that of fatty breasts. About 40 percent of women 40 years of age or older have dense breast tissue, which makes supplemental breast cancer screening essential.

The modalities suggested are magnetic resonance imaging (MRI), which is the most sensitive and is indicated for women with the highest risk of breast cancer, and ultrasound, which is suggested for dense-breasted average-risk women.

"The most common alternative screening modality, MRI, cannot be used with women who have pacemakers or other devices, severe claustrophobia, or renal insufficiency," according to Ellen B. Mendelson, professor of radiology at Northwestern University Feinberg School of Medicine (Chicago, IL), and Wendie A. Berg, professor of radiology at Magee-Womens Hospital of UPMC (Pittsburgh, PA).

Through the years, ultrasound has been a focused examination. Although supplemental screening via ultrasound is unaffected by breast density, is not associated with ionising radiation, and does not require IV contrast material, acceptance of this modality has lagged. Lack of available intensive training opportunities is cited as a significant factor.

"To realise ultrasound's potential to increase the number of cancers detected, intensive training programmes need to be put in place for physician performers and interpreters for both handheld and automated breast ultrasound systems," Professors Mendelson and Berg point out.

The opinion piece is published in the *American Journal of Roentgenology (AJR)*.

Breast cancer is the most common cancer in women worldwide, with nearly 1.7 million new cases diagnosed in 2012 (second most common cancer overall). This represents about 12 percent of all new cancer cases and 25 percent of all cancers in women, according to World Cancer Research Fund International.

Source: American Roentgen Ray Society

Image Credit: RSNA

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