Inconsistencies with breast density protocols can be solved

While everyone in the healthcare industry agrees that early detection of breast cancer saves lives, much less consensus can be found across the broader conversation of breast cancer screening in general. This inconsistency is especially apparent as it pertains to breast density, an issue that carries significant weight for both clinicians and patients. It is necessary for radiologists to not only acknowledge and understand how breast density impacts screening in general, but also to recognize the discrepancies in today's breast density protocols, best practices for handling them and how this can affect clinicians and patients.

by Tracy Accardi

To start, consider the way a patient's breast density is currently assessed. Most commonly, radiologists complete a visual assessment, which involves looking at digital images of the patient's breasts and determining which of the categories her tissue fits into best according to a classification system known as the Breast Imaging Reporting and Data System (BI-RADS). There are four classifications to establish breast density type, which include – from least to most dense – fatty, scattered fibroglandular, heterogeneously dense, and extremely dense. Although the four categories help establish what radiologists should be looking for visually to determine if a woman has dense breasts, each radiologist's individual perceptions are open to interpretation, potentially leading to inconsistencies in classification. As a result, some women may be misinformed about what their breast density is, which can be problematic considering breast density has long been recognized as a risk factor for cancer. In fact, women with very dense breasts are four to five times more likely to develop breast cancer than women with less dense breasts [1,2].

Screening protocol for dense breast patients

Once a woman's breast density is classified, there is a good deal of debate regarding next steps for breast cancer screening. In fact, in a 2017 Kadence study, only 32 percent of the surveyed radiologists in Europe indicated they have a formal screening protocol in place for patients with dense breastS [3]. There are a number of modalities radiologists can choose to utilize when screening women for breast cancer, however, very dense breasts are challenging to read, particularly when using traditional 2D mammography. This is because suspicious calcifications appear white on a mammogram, blending in with dense breast tissue that is similar in colouring that is also known as a "masking effect." Therefore, the imaging modality used to screen patients, especially those with dense breasts, truly matters. In the U.S., for example, Hologic's 3D Mammography Exam is the only mammogram that is FDA-approved as superior to standard 2D mammography for routine breast cancer screening of all women, including those with dense breasts [4]. Despite this, there are no official guidelines that radiologists are encouraged to follow when screening their patients with dense breasts. As a result, patients may be missing the opportunity to receive a breast cancer diagnosis earlier on so they can start treatment right away because they weren't screened with the most appropriate technology.

Clearly, there are many ways that clinicians across the world are currently approaching breast density protocols, especially as they pertain to assessment and screening. These inconsistencies are creating confusion among clinicians and patients alike. Fortunately, there are a number of solutions for this issue. When assessing density, radiologists should consider technology available to them to help remove subjectivity from their evaluations. In fact, clinicians can combine their patient-specific knowledge with artificial intelligence (AI), which—thanks to machine learning-based algorithms—can be used to classify breast tissue within the BI-RADS category, allowing for objective, accurate assessments. As a result, women can and should be better informed about what their breast density truly is, which may help those who didn't realize they were at risk for cancer to be more compliant with screenings. Additionally, radiologists and their facilities should offer their patients the best possible technology that exists for screening dense breasts, pending they have no extenuating limitations based on their individual patient profiles.

Healthcare professionals owe it to their patients to find solutions that provide the best possible outcomes. By making breast density and the inconsistencies surrounding it a priority for reconciliation, radiologists can best deliver care to their patients.

References

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