



Healthcare Provider Guidance for Breast Cancer Screening

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Abstract

Breast cancer is the most common non-skin cancer in American women. Currently there are multiple differing recommendations regarding the appropriate approach to breast cancer screening. Unfortunately this lack of clarity causes confusion on the part of the healthcare provider and patient which may lead to suboptimal healthcare decisions. The current recommendations are reviewed and patient guidance is discussed below in a concise, organized format.

Keywords

Breast cancer, Screening, Recommendations, Guidance

Introduction

The number and variability of recommendations regarding screening mammography for breast cancer detection has undoubtedly left even the most educated patients and primary care physicians in a state of confusion. Unfortunately, confusion often leads to paralysis rather than conviction. In the health care setting it is our role to confidently guide our patients. We are accustomed to making medical decisions on a daily basis in areas without perfect data, and our guidance is especially important with the proliferation of non-medical experts issuing opinions. In this article the most recent recommendations for breast cancer screening from the most relevant groups are summarized in an easy to understand format. Also a few points of analysis and recommendations for patient guidance are discussed.

Short Commentary

All of the consensus recommendations try to balance the benefits of breast cancer screening against its harms. Table 1 summarizes the recommendations for breast cancer screening from the most influential medical groups. The benefits of breast cancer screening include more early-stage cancers detected, less morbidity with earlier detection, and reduction in cancer-related deaths [1,2]. Harms include increased cost, false positive exams (patients recalled for additional testing who do not have cancer), anxiety, and unnecessary biopsies [3,4]. Most patients prefer the inconvenience of additional testing to gain the peace of mind that comes from knowing they are likely cancer free. The increasing use of tomosynthesis as a screening tool has the ability to decrease these harms by reducing recall rates, increasing cancer detection rates, and reduce both costs and mortality [5,6].

The American Cancer Society's (ACS) Breast Cancer Facts and Figures document is full of insightful data [7]. Interestingly 25% of breast cancer deaths are women diagnosed in their 40's. Unfortunately, these women often develop more aggressive cancers. These women also have the most life-years to potentially lose and often still have dependents relying on them. This is important because much of the controversy regarding breast cancer screening involves the appropriate time to begin testing. ACS data suggests that minority populations are particularly disadvantaged by delaying screening [7]. These data suggest 40 may be the most appropriate age to begin screening.

Another topic that is becoming increasingly discussed is the phenomenon of over-diagnosis which is the concept that some cancers which are diagnosed will not be the ultimate cause of death. Are there cancers that do not need treatment? Possibly. However that is a decision best made by the patient after we offer them all the information we have about their particular case. This perceived harm is really an issue of over-treatment rather than over diagnosis since no physical morbidity is created by screening. Increasing the screening interval only delays the diagnosis by the amount of time that the patient waited. Cancers to not regress and avoiding looking for a problem does prevent its existence. Multiple studies have shown increased breast cancer morbidity and mortality when detection occurs at a later, more advanced stage [1,2,8].

The governmental USPSTF group contains no breast radiologists and seems to approach the issue from a macro level motivated by a financially weighted argument as biennial testing results in less expense. On the other hand groups that interact with patients more directly such as the American College of Radiology (ACR), Society

Table 1: Summary of breast cancer screening recommendations from various medical groups.

Organization	Begin and frequency	End
ACR [14], SBI [15], ACOG [16]	40: Annual	Individually decided
ACS [17]	40-44: Optional 45-54: Annual 55: Annual or biennial	Life expectancy < 10 years
USPSTF [18]	40-49: Individual choice 50-74: Biennial	75

ACR: American College of Radiology; SBI: Society of Breast Imaging; ACOG: American Congress of Obstetricians and Gynecologists; ACS: American Cancer Society; USPSTF: US Preventive Services Task Force.

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of Breast Imaging (SBI), and the American Congress of Obstetricians and Gynecologists (ACOG) seem to approach the issue from an individual patient level by advocating more frequent surveillance. To reinforce this focus on patients, a new program from the ACR called Imaging 3.0 encourages radiologists to become more visible to patients in order to facilitate patient participation creating patient centered care [9].

Each provider who counsels patient regarding breast cancer screening should be familiar with the published recommendations of various groups in [table 1](#). It is then that provider's duty to discuss the data referenced in this article with each patient in light of their patient specific risk factors. Most patients are unaware that in the USA, 1 in 8 women will develop breast cancer [7]. Annual screening diagnoses more cancers than any other timeframe and is associated with an increased overall breast cancer specific survival [9]. However nothing comes for free, and in order to achieve additionally detected cancers there will be extra expense and unnecessary testing [3,4]. If a healthcare provider recommends against annual screening, they should realize that interval cancers will develop more frequently within their patient population. They should also be prepared to explain their decisions to those patients and their families.

In spite of the controversy and wherever you may fall on the spectrum of screening mammography, patient are best served by unambiguous guidance from their health care providers about when to begin screening for breast cancer. Screening mammography has been proven unequivocally to decrease mortality [10-13]. The harms which sway people away from screening are less quantified. We should all adopt a position and recommend it with conviction to our patients. Our expertise is especially valuable in the setting of multiple conflicting recommendations and the noise created by non-expert advice.

Conflict of Interest

No conflict of interest.

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