Breast Cancer Screening Revisited

The revised United States Preventive Services Task Force (USPSTF) breast screening guidelines, released in November 2009, have generated confusion among providers and patients alike. The Swedish Cancer Institute Breast Program has decided to endorse the breast screening guidelines of the American Cancer Society: Women age 40 and older should obtain annual screening mammograms, have an annual clinical breast exam, and be familiar with their breasts.

The USPSTF Guidelines

The USPSTF is intended to be an unbiased group that reviews selected relevant studies and makes guideline recommendations for a variety of diagnoses and conditions. The reviewers are predominantly primary care and public health physicians with backgrounds in study design and review. The guidelines are reportedly reviewed by selected specialists prior to release but no breast specialists were on the actual USPSTF panel. The guidelines attempt to weight the potential benefit of a service against the potential harm and make recommendations accordingly. For breast screening, the harms considered were “psychological harms,” retrospectively unnecessary imaging tests and biopsies in women who are found not to have cancer, inconvenience, and the possibility of treating a cancer that would not have been life threatening. Radiation exposure was considered to be a minor concern. Regarding benefits, the USPSTF recommendations state: “There is convincing evidence that screening with film mammography reduces breast cancer mortality.” Numerous studies have shown a 30 percent reduction in death from breast cancer with the American Cancer Society guidelines.

The revised USPSTF guidelines recommend that women between ages 40 and 49, with no history of genetic mutations or chest-wall radiation, not have routine screening mammograms but rather discuss the pros and cons of obtaining mammograms with their primary-care providers. In that age group the USPSTF concluded that “there is moderate certainty that the net benefit is small.” For women aged 50 to 74 years, the USPSTF states that “there is moderate certainty that the net benefit is moderate” for obtaining screening mammograms every two years. Due to a lack of evidence, the USPSTF felt that they could not assess the balance of benefits and harms for screening mammograms for women 75 and older.

For the teaching of breast self exams, the USPSTF concluded that “there is moderate certainty that the harms outweigh the benefits.” They felt that there was insufficient evidence to assess the balance of benefits and harms for clinical breast exams.

Designing and interpreting studies aimed at assessing the risks and benefits of mammograms is complicated. As a result, physicians and scientists frequently reach different conclusions and weigh the data differently. That is the case with this study, where even
the method used to evaluate potential harms and benefits is controversial. Therefore, it should come as no surprise that many physicians and specialty organizations have been mixed in their reception of the guidelines. Some have applauded the acknowledgement that screening mammograms carry potential harms as well as benefits. Others have raised concerns that discouraging women from obtaining regular screening mammograms will reverse the current trend of decreased mortality from breast cancer achieved by early diagnosis.

The Swedish Cancer Institute Response

The Swedish Cancer Institute Breast Program has carefully reviewed the USPSTF materials, commentaries, critiques and reviews. As a result, we have decided to join with other organizations in continuing to endorse the guidelines of the American Cancer Society that recommend that women ages 40 and older obtain annual screening mammograms, have an annual clinical breast exam and consider performing regular self-breast exams. Women with a 20 percent or greater lifetime risk for breast cancer should also obtain an annual breast MRI.

Things to Consider

1. 20 percent of breast cancers are currently detected in women under 50, providing potentially lifesaving early starts on treatment for these women. We wish to increase the percentage of cancers detected at these early stages, not to rule out the opportunity for early intervention. Early detection may also improve patients' treatment choices.

2. Studies have consistently demonstrated a 30 percent reduction in breast cancer deaths over the past ten years in the U.S., most of which is directly related to early detection with mammography.

3. The earlier a breast cancer is detected, the less chance that it will have spread.

4. Some of the potential harms of mammography will be lessened when the studies are done by more experienced physicians at hospital systems, like Swedish, that treat large numbers of women with breast symptoms and breast cancer.

4. American Academy of Family Physicians, American Academy of Nurse Practitioners, American College of Physicians, American College of Preventive Medicine. [These lists are not exhaustive.]
5. American Society of Clinical Oncology, American College of Obstetricians and Gynecologists, American College of Surgeons, American College of Radiology, American Society of Breast Disease, American Society of Breast Surgeons, National Comprehensive Cancer Network, National Consortium of Breast Centers, Society of Breast Imaging. [These lists are not exhaustive.]