

ACR, SBI Comments Regarding Brodersen and Siersma Study in Annals of Family Medicine

Anxiety regarding inconclusive test results is real and is only natural. Breast cancer researchers and clinicians continue to work to reduce the number of false-positive exams that patients experience, and ensure that additional exams performed to evaluate the findings are minimized, to make the experience as comfortable as possible. When a woman is recalled after an inconclusive mammogram, usually all that is required to resolve the finding and reassure the woman is a few additional mammogram views or an ultrasound. Of course, if there is any concern after the additional evaluation, some women will receive a recommendation for a needle biopsy. Physicians continue to refine the reporting process to ensure that patients receive results as quickly as possible. Attention to women's feelings associated with test results is, and should be, a concern for those who provide this care.

Brodersen and Siersma, like other studies prior, notes that patients experience anxiety regarding test results and that these differences decline over time. However, there are too many methodological questions and irregularities regarding this analysis to accept the authors' conclusion that anxiety is worse or more prolonged than previous studies concluded. For instance:

1. Which (and how many) women with false positive results (compared to those with normal results) had a family history of breast cancer? Those with a family history are more likely to have a positive test result. A positive test, and a family history, would be expected to elevate concern.
2. Which (and how many) women with a false positive exam were put into shorter term surveillance (e.g. given more frequent mammograms)? They now have normal test results, but may not have been returned to the normal screening pool. Short term surveillance is for women at higher risk. This would likely raise anxiety.
3. Which (and how many) women with abnormal test results had a biopsy? This would likely increase anxiety compared to those who solely had a repeat mammogram or ultrasound. These women should be regarded as a third group since they affect overall scores of a group that initially had only a false positive imaging exam.
4. Which (and how many) women in the normal and abnormal group had positive test results on their next round of screening? Was this cancer (cancer is more likely among those with a positive baseline test)?
5. The authors correctly cite that taking the survey under different conditions (women with normal results took the baseline survey at home, whereas women with abnormal results took it in the clinic) may have introduced bias. They guess that bias among women with abnormal results would tilt towards less stress. One could certainly argue that the opposite was true.

The overarching fact is that benefits of breast cancer screening far outweigh the harms. According to National Cancer Institute data, since mammography screening became widespread in the early 1990's, the U.S. breast cancer death rate, unchanged for the previous 50 years, has plummeted more than 30 percent. These findings do not call into question the value of mammography, but remind medical professionals that some women experience after effects of a false-positive exam. The American College of Radiology and Society of Breast Imaging would be happy to work with other professionals to identify ways to reduce anxiety and contribute to women's wellbeing.