Breast Arterial Calcifications Could Signal Something More Serious

New study suggests association between BACs on routine mammography and increased risk of coronary artery disease and stroke

CLEVELAND, Ohio (October 5, 2016)—A new study coming out of The Reading Hospital in Pennsylvania may lead medical professionals to rethink how they view breast arterial calcifications (BACs) on routine mammograms. Long viewed as relatively benign, BACs could signal an increased risk of more serious health problems, including heart disease and stroke. The study results will be presented at the 2016 Annual Meeting of The North American Menopause Society (NAMS) in Orlando, October 5-8.

The new study involved 10 years of follow-up with 1,029 women who had BAC data at baseline but did not show signs of cardiovascular disease at time of recruitment. The well-studied intimal layer calcifications are strongly associated with cardiovascular disease-related morbidity and mortality. However, BACs are calcifications of the medial layer of breast arteries and, by extension, generally perceived as merely benign findings. For this reason, BACs have been inconsistently reported on mammography to date.

Because the true clinical significance of BAC presence has not been well studied, this study was undertaken to assess whether the presence of BACs on routine mammograms could be an early marker for predicting the development of cardiovascular disease in women who did not present symptoms at baseline. The study showed that the presence of BACs may be specifically associated with a significantly increased 10-year risk of developing both coronary artery disease and stroke in asymptomatic women.

“After controlling for age, we found that BAC-positive women were 2.3 times more likely to have coronary artery disease and 3.2 times more likely to have a stroke,” says Ragad Asmaro, MD, from Drexel University College of Medicine and lead author of the study.

“This study raises questions about the potential long-term health implications of BACs and demonstrates a need to conduct additional large population-based studies to confirm BAC as a predictor of future development of cardiovascular disease,” says Dr. JoAnn Pinkerton, NAMS executive director.

“The ability to gain additional screening benefits from a test that is already routinely done, namely a mammogram, would offer a huge advantage without additional costs,” says Dr. Peter Schnatz, Study...
Primary Investigator and NAMS President. Dr. Xuezhi (Daniel) Jiang, one of the authors, also points out that this would offer a major advance in women’s health care, if these results can be confirmed.

Drs. Asmaro, Pinkerton, Schnatz, and Jiang are available for interviews before the presentation at the Annual Meeting.

Founded in 1989, The North American Menopause Society (NAMS) is North America’s leading nonprofit organization dedicated to promoting the health and quality of life of all women during midlife and beyond through an understanding of menopause and healthy aging. Its multidisciplinary membership of 2,000 leaders in the field—including clinical and basic science experts from medicine, nursing, sociology, psychology, nutrition, anthropology, epidemiology, pharmacy, and education—makes NAMS uniquely qualified to serve as the definitive resource for health professionals and the public for accurate, unbiased information about menopause and healthy aging. To learn more about NAMS, visit www.menopause.org.