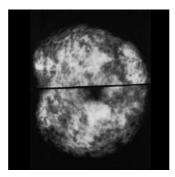


## Study: Does Breast Density Increase Breast Cancer Risk?



Women with dense breast often worry about breast cancer, but new research from Johns Hopkins shows that breast density alone does not affect their risk. Age and body fat are more important co-factors that contribute to breast cancer risk, according to the Johns Hopkins study published in the journal *European Radiology*.

Previous studies suggest that women with denser breast tissue have an increased risk of breast cancer. However, these studies used data from mammograms that "cannot accurately measure breast density," says Wenlian Zhu, PhD, a research associate in the Johns Hopkins University School of Medicine and an author of the study.

"Our research may help dispel the assertion that breast density alone is something women should be worried about with regard to their breast cancer risk, and it may help minimise confusion and unnecessary concern," Dr. Zhu explains.

See Also: RSNA15: Study: Breast Density Alone Not a Risk Factor for Cancer

To confirm whether breast density is an independent risk factor for breast cancer, the researchers examined 3D, T1-weighted MRI breast scans done between 2007 and 2014 on 410 patients with invasive cancer in one breast, 73 patients with ductal carcinoma in situ, and 361 women with no evidence of breast cancer. The imaging technique used offers high contrast between fatty and dense glandular breast tissues, providing a more accurate measurement of breast density.

See Also: Mammographic Screening for Women with Dense Breasts

In addition, the researchers used MRI scans to assess adiposity using measurements of the fatty tissue thickness in the upper abdomen right beneath the breast. Then, investigators searched for links among breast cancer and breast density, body adiposity, and subjects' ages. Their analysis revealed strong correlation between both age and adiposity with breast cancer. However, the correlation between breast cancer and breast density alone was insignificant.

Dr. Zhu says one likely explanation for their finding is that women with the densest breasts tended to be young and lean, both factors aligned with lower breast cancer risk.

She cautions that this study did not specifically examine the interactions among age, adiposity and breast density for older women. Testing whether breast density is associated with breast cancer in this population will be the subject of future research, Dr. Zhu adds.

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