

MRI Could Aid Breast Cancer Detection in Average-Risk Women

New research presented at the 2015 American Society of Clinical Oncology Breast Cancer Symposium implies magnetic resonance imaging (MRI) screening every three years could be enough to establish an interval cancer rate of zero among women with average risk.

Researchers enrolled 2,120 average-risk women and randomized them to receive breast MRI and mammography screening every 12, 24, or 36 months. Ninety-one percent of the MRI screens yielded a BI-RADS I or II finding. A total of 175 of the 3,861 screens were BI-RADS III, and after single MRI follow-up in 98.3 percent of those and biopsy in 1.7 percent, all 175 were uneventful/benign. An additional 171 screens returned a BI-RADs IV or V finding, and those women underwent MR-guided biopsy. Nearly 40 percent of that group were found to be benign, 35.7 percent were found to be malignant, and 24.6 percent were found to be high-risk. This yielded a positive predictive value of 60.5 percent. There were 61 cancers identified in 2,120 women, for an overall detection rate of 28.8 per 1,000 women. All but one of the 61 were only detected on MRI, and one was detected on both mammography and MRI. The supplemental cancer yield of MRI in women undergoing mammography was 28.3 per 1,000 women. The supplemental yield of mammography in women undergoing MRI was zero. Twenty of the cancers were DCIS, and the other 67.2 percent were invasive. About 43 percent of the cancers were high grade, and 32.8 percent were estrogen receptor/progesterone receptor negative. No interval cancers were discovered.