

MRI detects breast cancer at earlier stage

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Magnetic resonance imaging (MRI) coupled with mammography detects almost all cancers at an early stage, thereby reducing the incidence of advanced stage breast cancer in high-risk women.

"Earlier stage breast cancers are more likely to be curable," said lead researcher Ellen Warner, M.D., M.Sc., medical oncologist in the Department of Medicine, Division of Medical Oncology at Sunnybrook Health Sciences Center, in Toronto, Canada.

"We can be fairly confident that if screening with MRI finds cancers at a much earlier stage, it probably also saves lives," added Warner, who presented details of these results at the CTRC-AACR San Antonio Breast Cancer Symposium, held Dec. 9-13.

The researchers separated 1,275 [women](#) at high risk for breast cancer into two groups: One group was screened with MRI plus mammography, and the second, a control group, received conventional screening by mammography. Participants had the defective BRCA1 or BRCA2 gene mutation, which suggests a very high lifetime risk of developing breast cancer.

Warner and colleagues followed the women over several years to determine which screening method detected cancer at a significantly earlier stage.

Forty-one cases of breast cancer were diagnosed in the MRI group compared with 76 diagnoses in the control group. There were proportionately fewer advanced breast cancers, and more early cancers among women who screened with MRI compared with those not screened with MRI.

Furthermore, cancer size was smaller in the MRI group. The average size of invasive cancers in the MRI group was 0.9 cm compared to 1.8 cm in the control group. Three percent of cancers in the MRI group were larger than 2 cm in diameter compared with 29 percent of those in the control group.

"These results will hopefully convince high-risk women and their health care providers that breast screening with yearly MRI and mammography is a reasonable alternative to surgical removal of their breasts, which is commonly done to prevent [breast cancer](#)," Warner said.

Source: American Association for Cancer Research ([news](#) : [web](#))

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