Abbreviated protocol feasible in breast cancer MRI screening

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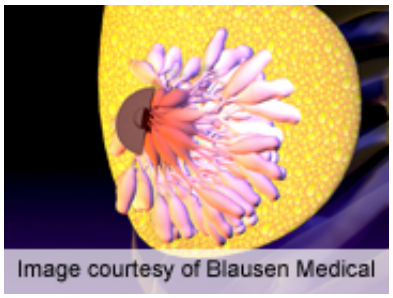

(HealthDay)—An abbreviated protocol (AP) can accurately establish the absence of breast cancer and has diagnostic accuracy similar to that of a full diagnostic protocol (FDP) in breast magnetic resonance imaging (MRI) screening, according to a study published online June 23 in the *Journal of Clinical Oncology*.

Christiane K. Kuhl, M.D., from the University Hospital of Aachen in Germany, and colleagues conducted a prospective observational reader study in 443 women who underwent 606 screening MRIs. Radiologists searched for significant enhancement by reviewing the maximum-intensity projection (MIP) images. They then characterized enhancement and established diagnosis by reviewing the complete AP (first postcontrast subtracted and MIP images). The FDP was analyzed thereafter.

The researchers found that MRI acquisition time was 17 minutes for the FDP and three minutes for AP. The average time taken to read a single MIP was 2.8 seconds, and the complete AP took 28 seconds. Eleven breast cancers were diagnosed (additional cancer yield, 18.2 per 1,000), with MIP readings positive in 10 of these cancers (90.9 percent). MIP allowed establishment of the absence of breast cancer in 418 of 419 cases (negative predictive value, 99.8 percent). All cancers were diagnosed with interpretation of the complete AP and FDP. The specificity and positive predictive values were equivalent for AP versus FDP (94.3 versus 93.9 percent and 24.4 versus 23.4 percent, respectively).

"With a reading time

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