BI-RADS 3 Category Assessment Holds Up

VITALS

Major Finding: When breast lesions were assessed with MRI and placed in the BI-RADS category 3, a total of 162 lesions were benign and 5 were malignant on follow-up.

Data Source: A prospective study of 473 women.

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BY PATRICE WENDLING

CHICAGO — The majority of breast lesions assessed with magnetic resonance imaging and placed in the BI-RADS category 3 were benign on follow-up in a prospective study of 473 women.

The finding is reassuring because the category is reserved for "probably benign" findings, but doesn't resolve the confusion that exists over how to manage these lesions, according to lead researcher Dr. Michael T. O'Loughlin.

The American College of Radiology Breast Imaging Reporting and Data System (BI-RADS) breast lexicon was created in 2003 to standardize breast mammography, ultrasound, and MRI reporting. It includes assessment categories similar to those used in mammography, but doesn't tell physicians when to follow up on category 3 lesions. This had led some insurance companies to balk at providing coverage of follow-up breast MRIs in less than 1 year from the original study and some physicians to proceed directly to biopsy, he explained at the annual meeting of the Radiological Society of North America.

Dr. O'Loughlin and his colleagues scanned 473 women, with 158 (33%) given either a unilateral (104 women) or bilateral (54 women) category 3 assessment on their initial study. The lesions included 126 foci of enhancement, 65 nonmasslike regions of enhancement, and 35 benign-appearing masses, likely lymph nodes or fibroadenomas. A total of 119 women (75%) returned for follow-up imaging at a mean of 278 days after the initial examination (range, 31-951 days).

On follow-up, 162 lesions were benign and 5 were malignant, said Dr. O'Loughlin, a radiologist in a group practice in Hartford, Conn.

For the five cancers, the final diagnosis was confirmed on average 129 days after the initial MRI exam (range, 3-210 days). They consisted of one ductal carcinoma in situ and four invasive carcinomas, and ranged in size from 3 mm to 8 mm. All patients were node negative.

Session moderator Dr. Elizabeth Morris, director of breast MRI and breast imaging at Memorial Sloan-Kettering Cancer Center in New York, asked Dr. O'Loughlin how he handles follow-up in these patients, remarking that the average time for cancer change seems to be about 4 months.

"I like 6 months," he responded. "If it is cancer on follow-up, at most it is a 6-month delay. If I know the patient will not be returning for a year, I'd be calling it category 3 much less."

Confusion over the follow-up of category 3 lesions on breast MRI will be reduced with more studies looking at the outcome of this assessment category, Dr. O'Loughlin said in an interview.

"Thankfully the number of category 3 lesions that eventually are determined to be cancers is relatively rare," he said in the interview. "This is great for patients, but makes meaningful outcome data difficult to obtain."

Women given a category 3 assessment had a significantly lower mean age of 48.7 years, compared with 52 years for the remaining women. The MRI exams may not have been scheduled optimally for hormonally active breast tissue, which may help explain the younger age in women given the category 3 assessment, Dr. O'Loughlin said.

The mean age in the study was 50.9 years, and 91% of patients were white.

The majority of women were being scanned for diagnostic rather than screening purposes. Clinical indications included a new diagnosis of breast cancer (25%), a remote history of breast cancer (17%), an abnormal mammogram (34%), a strong family history of breast cancer (27%), prior breast surgery (26%), and an implant evaluation (0.6%). ■