BI-RADS 3 Category Assessment Holds Up

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, or 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 non–mass-like 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 the patient will not be returning for a year, I’d be calling it category 3 much less.”

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%). Patients could have multiple indications.

MRI Detected Breast Cancers Earlier in High-Risk Women

BY BRUCE JANCIN

SAN ANTONIO — Adding MRI surveillance to conventional mammography in women with BRCA1 or BRCA2 mutations results in a favorable stage shift, with breast cancers being detected at an earlier, more curable stage, according to a prospective cohort study.

This finding is consistent with the notion that MRI surveillance reduces distant recurrence rates and breast cancer mortality, although definitive proof must await another 5-10 years of study follow-up. Dr. Ellen Warner reported at the San Antonio Breast Cancer Symposium.

In the meantime, these encouraging interim results will hopefully convince very high-risk women and their physicians that surveillance with yearly MRI and mammography is a reasonable alternative to prophylactic mastectomy, added Dr. Warner of the University of Toronto.

A randomized controlled trial comparing MRI surveillance to mammography will never happen for ethical as well as practical reasons, she asserted.

The next-best study design would be a prospective cohort study, Dr. Warnier said.

Distant Metastasis More Likely in Obese Breast Cancer Patients

BY BETSY BATES

SAN ANTONIO — Obese women are substantially more likely than women of normal weight to die of breast cancer, a large Danish registry study concluded.

Researchers from the Danish Breast Cancer Cooperative Group examined extensive health information from nearly 19,000 women with breast cancer, with follow-up data available for up to 30 years post diagnosis.

Breast cancer patients with body mass indexes (kg/m2) greater than 25 faced a 42%-46% increased risk of developing distant metastasis, even after investigators adjusted for numerous other prognostic factors such as age, tumor size, histologic characteristics, estrogen receptor status, and lymph node involvement.

The disparity showed up early in the course of their disease, Dr. Marianne Ewertz said at the annual meeting of the San Antonio Breast Cancer Symposium.

“For distant metastasis, the curves begin to separate after 3 years,” said Dr. Ewertz, professor of oncology at Odense (Denmark) University Hospital.

By 5 years, women with a BMI of 25-30 and greater than 30 were 26%-38% more likely than normal weight women to die of breast cancer 10 or more years after diagnosis.

Women with BMIs of 25-30 and greater than 30 had more grade 3 tumors (P = .01), had more positive lymph nodes, and had more tumor invasion into deep fascia than did those with a BMI less than 25 (all P values less than .001).

They also had more grade 3 tumors (P = 0.04).

However, all of these factors were statistically accounted for in the multivariate analyses of distant metastasis and overall survival.

Poorer outcomes over time may indicate that adjuvant therapy is less effective in obese compared to non-obese women.

Heavier women in the study old- er, were more likely to be post-menopausal, had larger tumors, had more positive lymph nodes, and had more tumor invasion into deep fascia than did those with a BMI less than 25 (all P values less than .001).

Therefore, prospective observational evidence is gathered from huge, well-controlled population databases such as the Danish health registries. “This is kind of evidence is gathered from huge, well-controlled population databases such as the Danish health registries. “This is kind of evidence is gathered from huge, well-controlled population databases such as the Danish health registries. “This is kind of