Breast MRI in pregnancy-associated breast cancer may change the surgical management of patients.

Breast MR imaging may play an important role in pregnancy-associated breast cancer (PABC), changing surgical management of many patients, according to a study published in the *American Journal of Roentgenology*.

Researchers from Maryland, New York, and Illinois performed a retrospective review to determine the imaging features of PABC on breast MR imaging and to consider the impact of preoperative MR imaging on patient management.

The researchers reviewed the medical records of 183 women who presented with a new diagnosis of breast cancer during pregnancy or within one year postpartum and MR images were available for 53 of these patients.

The results showed that nine women (17%) presented during pregnancy and 44 (83%) presented during the first year postpartum. The sensitivity of MR imaging was 98% (52/53).

The most common findings of PABC on MR imaging included:
- Solitary mass in 29 patients (55%)
- Nonmass enhancement in 12 patients (23%)
- Multiple masses in 8 patients (15%)

MRI showed a pathologically proven larger tumor size or greater extent of disease than did mammography or ultrasound for 12 patients out of the 53 (23%), with an additional eight patients (15%) having findings suspicious for greater extent of disease but having unavailable pathologic data.

Surgical management was changed for 15 patients (28%) based on the breast MR imaging, with four patients (8%) requiring a larger lumpectomy, seven (13%) no longer being considered candidates for lumpectomy, two (4%) having contralateral disease, and two (4%) having unsuspected metastasis.

The researchers concluded that breast MR imaging was useful in patients with PABC, changing surgical management in 28% of the patients.


Links: