

Evaluation of core-needle biopsy in Breast Imaging Reporting and Data System 3 breast mass

Background/aim

A crucial approach for finding breast cancer sooner is the triple examination of breast diseases. Our goal was to determine if ultrasound-guided core biopsies were required to investigate clinically ambiguous breast tumors that lacked imaging features suspicious for malignancy in Breast Imaging Reporting and Data System 3.

Patients and methods

A prospective study was performed on 50 patients fulfilling our eligibility criteria who presented with symptomatic indeterminate breast masses chosen according to our selection criteria and underwent an ultrasonography-guided core biopsy in the period from January 2021 to March 2022.

Results

A total of 50 clinically ambiguous breast masses were investigated, of which 47 (94%) were benign lesions, including 34 (68%) lesions were fibroadenomas, six (12%) lesions were fibrocystic disorder without ductal hyperplasia, one (2%) lesion was fibrocystic disease with ductal hyperplasia with no atypia, and six (12%) lesions showed periductal mastitis. Two (4%) lesions were proliferative breast lesions with focal atypia. One (2%) lesion was infiltrating duct carcinoma grade 2.

Conclusion

Ultrasound-guided core biopsy is necessary for investigating clinically indeterminate breast mass in symptomatic patients with Breast Imaging Reporting and Data System 3 finding on imaging, for early detection of malignancy and atypical hyperplastic changes.

Keywords:

core biopsy, indeterminate breast masses, malignancy, proliferative atypia