Comparison of fine-needle aspiration cytology and core biopsy for diagnosis of breast cancer

Aileen Azari-Yam
Tehran University of Medical Sciences, Iran

Breast cancer still represents the leading tumor among women and the incidence of the disease is rising all over the world. Conventional mammography, full-field digital mammography (FFDM), ultrasound, MRI, positron emission tomography (PET), and positron emission mammography (PEM) are currently used modalities for breast cancer screening and diagnosis; however, pathological characterization still plays an essential role for differential diagnosis and to avoid surgical over-treatment in case of breast lesions with suspicious features. Core needle biopsy (CNB) and fine-needle aspiration (FNA) cytology are useful procedures in diagnosing breast cancer. We reviewed 50 breast cancer patients who had undergone FNA, core biopsy, and also either mastectomy or lumpectomy and compared the sensitivities of these diagnostic methods. Sensitivity for FNA or CNB interpreted as either atypical, suspicious for malignancy or malignant was 95.6% for FNA and 96.1% for core needle biopsy which showed no statistically significant difference (P>0.05). In conclusion, FNAC and CNB represent sensitive methods for the characterization of breast masses.

Biography
Aileen Azari-Yam has completed her MD in Shahid Beheshti University of Medical Sciences, Tehran, Iran and specialized in Anatomical and Clinical Pathology from the same university. She defended her thesis for PhD degree in Medical Genetics in Tehran University of Medical Sciences in 2016. She is an Assistant Professor of Medical Genetics in Tehran University of Medical Sciences.

azari_yam@sina.tums.ac.ir

Notes: