Preoperative Diagnosis of Non-Palpable Breast Lesions

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Dear Sir,

We have read the original article “Preoperative ultrasound guided needle localization for non-palpable breast lesions” by K. Das, D.K. Sarkar, R. Karim, and A.K. Manna in March–April issue, 2010 [1] with great interest. Authors need to be congratulated for a well written manuscript. After having read the article, we think there are few issues which need to be addressed. This study included 22 patients of non-palpable breast lesions with sonography/mammography BIRADS R3, R4, and R5 lesions. All of these 22 patients underwent sonography guided wire localization and lumpectomy without preoperative diagnosis. Only 3 out of 22 breast lesions (13.67%) were proved to be malignant on histopathological examination. Margin clearance of the tumor in case of malignant lesion is not mentioned in the article. It is also not clear how could they stage node (n) disease in case of malignant lesions, as evident from the Table 2, [1] when end point of the surgery was lumpectomy only.

We believe that cases of BIRADS R3 could have been given the choice of either follow up/percutaneous image guided fine needle aspiration cytology (FNAC)/closed needle biopsy (CNB) rather than subjecting them to surgery. It is also not clear how many of these patients with BIRADS R3 actually ultimately proved to have malignancy on histopathology after excision. Category wise histopathological findings in various grades of BIRADS could have helped in understanding these results better. Though ultrasonography (USG) guided/

needle directed open biopsy is the gold standard for non-palpable breast lesions, image guided CNB gives reasonable accuracy, enough to establish the diagnosis and then, undertake surgery under intraoperative sonography guidance with a curative intent. In a large study of 1,681 patients, Fajardo et al. [2] concluded that percutaneous, imaged-guided CNB is an accurate diagnostic alternative to surgical biopsy in women with non-palpable breast lesions with a sensitivity, specificity and accuracy of 91%, 100%, and 98%, respectively. In a study of 204 suspicious non-palpable breast lesions, Boliver et al. [3] showed 97% sensitivity, 100% specificity, 100% positive predictive value, and 95% negative predictive value of USG guided CNB for the diagnosis of malignancy and stressed the importance of minimum number of three cores per lesion. Comparison of FNAC and CNB with the literature available is largely difficult because of great differences in methodology and biases [4]. What may be more important to understand is their complementary role resulting in better preoperative diagnosis rate. Moreover, Abdel-Hadi et al. [5] concluded that it would be cost effective and time saving to use FNAC as a first-line investigation, followed by CNB in selected cases in order to maximize the preoperative diagnostic rate of cancer. In their study of 229 consecutive non-palpable breast masses, overall diagnostic accuracy was 98.9%, with a specificity and sensitivity of 99.3 and 96.7%, respectively. It is worthwhile to note that had image guided biopsy been done in those patients later found to have malignant lesion, USG guided excision of lump with curative intent would have been done in one sitting thus avoiding the trauma of second intervention. In a randomized controlled trial comparing USG guided lumpectomy of non-palpable breast cancer versus wire guided resection, Rahusen et al. [6] found superiority of USG guided excision over wire guided excision with respect to

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margin clearance. Moreover, USG guided excision also avoids unpleasant wire placement before surgery.

We believe that image guided/wire localized excision of non-palpable breast lump should be undertaken as a therapeutic procedure after FNAC/CNB suggest malignancy or inconclusive picture. It should not be used as procedure to establish the diagnosis and thereby, to give surgical scar to a number of patients who could have been followed with FNAC/CNB and follow up ultrasonography (USG).

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