LETTER TO THE EDITOR

Role of Ultrasound-guided Fine-needle Aspiration in Breast Imaging

To the Editor: I read with interest the original article by Mak et al.[1] The authors conclude with a recommendation that: "...in clinical practice, ultrasound-guided fine-needle aspiration [US-FNA] should be replaced by core biopsy".[1]

While I agree with all the advantages stated by the authors for ultrasound-guided core biopsy (US-CB), including lower specimen insufficiency rate, lower false-positive and probably false-negative rates, and reduced need for subsequent interventions to achieve a definitive diagnosis, I feel that the advantages of US-FNA were underemphasised.

US-FNA is not only a simple, quick, low-cost, and safe procedure; the result can be available very quickly, which has the potential to enable patients to receive a malignant or benign diagnosis in real time if pathological support is available. In a literature review involving 2673 and 1851 samples of US-FNA and US-CB, respectively, the false-negative rates of the two techniques were comparable, although the author also noted that inadequate specimen rates were higher using US-FNA.[2]

In Mak et al's study,[1] the authors found a false-negative case from US-CB and postulated that the possible cause could have been technical factors. I agree that, in clinical practice, sampling errors do occur occasionally, and may be procedure-related. This may be especially so if the lesion is small and / or soft in consistency, in which case the small target lesion may be displaced rather than sampled by the needle during sampling by the spring-loaded core biopsy device.

In my experience, I saw an increasing amount of clinically non-palpable solid breast lesions detected by ultrasound for which biopsy assessments were requested. Consequently, a quick, simple, low-cost, and safe procedure is essential. For US-FNA, only disinfection of the skin and the ultrasound transducer is needed, while US-CB involves a more aseptic procedure with drapes and application of an appropriate sterile transducer cover, which requires more time and cost.

In my current practice, a clinically non-palpable solid breast lesion that is classified as indeterminate requires biopsy assessment, usually with US-FNA as the initial procedure, although for those breast lesions that show suspicious ultrasound features, US-CB would be performed as the initial procedure if possible. Sometimes, lesions classified as probably benign may also be sampled by US-FNA rather than short-interval follow-up, as specified by the referring breast surgeon. If the result of US-CB is inconclusive, repeated US-CB or wire-guided excision for pathological examination might be requested by the referring breast surgeon as part of a triple assessment management strategy. All patients with cytologically malignant US-FNA samples would also undergo US-CB in multiple needle passes in order to secure a more accurate assessment of the invasiveness of the malignancy for treatment planning.

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REFERENCES

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2. Britton PD. Fine needle aspiration or core biopsy. The Breast. 1999;8:1-4.

