

Value of modified triple test in the diagnosis of palpable breast lumps

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Background and objectives

Breast lumps in women are a common clinical problem that require rapid and accurate evaluation with an important aim of excluding any malignancy. The modified triple test includes physical examination, ultrasonography and fine needle aspiration cytology. The objective of the study was to evaluate the accuracy of this modified triple test (MTT) in the management of palpable breast lumps and to check if the triple assessment can be employed as an alternative for excisional biopsy.

Methods

A prospective cross sectional study was conducted at Al-Imamein Al-Kadhimaain Medical City in Baghdad/ Iraq. Fifty patients with palpable breast lumps were assessed by all the components of MTT. The results of individual components as well as the overall MTT were compared with the final histopathological examination.

Results

Physical examination though Important but showed unreliable results. Ultrasonography showed as high as 94.29% sensitivity while fine needle aspiration cytology appeared to be less sensitive and specific than the Ultrasound but showed remarkable 88.89% positive predictive value. Finally, the modified triple test showed 100% sensitivity, 93.33% specificity and an accuracy rate of 98%.

Conclusions

The triple test is 98% accurate in the diagnosis of palpable breast lesions when all three elements were concordant (benign or malignant). MTT is reliable in guiding the clinician in the efficient management of patients with breast lumps. MTT is beneficial in reducing the number of unnecessary open biopsies to confirm the diagnosis. The output of MTT is easily reproducible, making it a valid and reliable diagnostic test in the management of palpable breast lumps.