

**DIAGNOSTIC VALUE OF MODIFIED TRIPLE TEST
FOR EVALUATION OF PALPABLE DISCRETE BREAST
MASSES IN YOUNG WOMEN**

BY

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ABSTRACT

Background: Palpable breast masses are a common breast symptom in young women and a source of anxiety. Fortunately a majority of these masses are benign. Triple assessment using clinical breast examination, sonography and fine-needle aspiration cytology is used to evaluate these masses avoiding biopsy in concordant results. Although triple diagnostic approach is used at KNH, it is not routinely done and its diagnostic value is not clear. This study aimed to establish the diagnostic value of modified triple test in this setting.

Objectives: To determine the diagnostic value of modified triple test for the evaluation of palpable discrete breast masses in young women under 35 years of age.

Design and setting: This was a cross-sectional study between August 2010 and October 2010 in the breast and general surgical out-patients clinics at KNH.

Patients and methods: 58 patients presenting with palpable discrete breast masses satisfying the inclusion criteria during the study period were recruited. All patients had a clinical breast examination, sonography and fine needle aspiration cytology performed. A core biopsy was also done as a reference standard.

Main outcome measures: The test results of the modified triple test and its elements (clinical breast examination, sonography and fine needle aspiration cytology) were compared to the histopathology results (reference standard).

Results: 58 patients were studied. The age range was 18 to 34 years with a mean of 25.5 years (sd±5.1). 45 patients had concordant MTT results representing a concordance of 77.5%. Concordant MTT had a sensitivity, specificity, PPV and NPV of 100%. The sensitivity, specificity, PPV and NPV was 100%, 92.3%, 60% and 100% respectively on CBE, 100%, 94.2%, 66.7% and 100% respectively on ultrasound and 100%, 98.1%, 83.3% and 100%

respectively on FNAC. Combinations of CBE and Ultrasound and CBE and FNAC had sensitivity, specificity, PPV and NPV of 100%.

Conclusion: Use of MTT for diagnosis of palpable breast masses in young women below 35 years of age, yields high diagnostic accuracy. The combinations of CBE and ultrasound; CBE and FNAC, have a high PPV and NPV with almost similar concordance in this population suggesting that they can be used for diagnosis.