

Diagnostic Accuracy of (FNAC) Biopsy in Palpable Mammary Lesions

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Abstract

Background Fine Needle Aspiration Cytology (FNAC) has advantage of providing a diagnosis before the time of surgery; this situation enable the patient and surgeon to discuss and decide the type of surgery to be done and may obviate the need for a 2 stage procedure in surgical management of breast cancer.

Objectives To study the accuracy, sensitivity and specificity of FNAC of solid breast mass compared to histopathological examination.

Methods A retrospective study includes 126 female patients palpable solid breast mass aged 17 to 67 years with masses in the breast. FNAC and histopathological studies was done to all of them.

Results Fifty six patients had mass in the Rt. Breast and 70 (57.4%) had mass in the Lt. breast. 58 (47.5%) masses diagnosed as malignant (54 true-positive and 4 false negative) with diagnostic accuracy of 93% (54 of 58). Sixty four patients (52.5%) were diagnosed as benign (62 true-negative and 2 false positive) with diagnostic accuracy of 96.8% (62 of 64).

Conclusions FNAC is simple, quick and relatively low cost procedure, with minimal patient discomfort; it is helpful in reducing the number of breast biopsies done for benign breast disease. It can provide a diagnosis before the time that operation is performed and this may help to obviate the need for two stage procedure in surgical management of breast cancer.

Keywords Solid breast mass, FNAC, Histopathological examination.

Introduction

Breast lump is the most common symptom associated with breast cancer; between 9% and 11% of breast lumps result in a diagnosis of breast cancer⁽¹⁻³⁾.

The prevalence of breast cancer among women who present with a breast lump increases with age from 1% for women 40 years of age and younger to 9% for women between 41 and 55 years of age to 37% for women aged 55 years and older⁽²⁾. In Iraq breast cancer had remained the commonest malignancy of female accounting for 16% of all cancers in Iraqi patients with cancers and with a general trend toward an increase in younger age group^(4,5).

If a circumscribed non-calcified solid mass is palpable, the recommended management is usually to obtain a tissue diagnosis, even when, according to morphologic criteria, the mass is probably benign⁽⁶⁻⁹⁾. The rationale behind this recommendation is the absence of published data on the safety and efficacy of periodic imaging surveillance for palpable circumscribed non-calcified solid breast masses⁽¹⁰⁾. Although previous studies have shown the safety and efficacy of periodic imaging surveillance for non-palpable or palpable circumscribed non-calcified solid breast masses on sonography, but pathologic diagnoses were not obtained in all cases^(11,12). Moreover, follow-up of a palpable mass with benign morphology may be more risky