CLINICAL EXAMINATION, MAMMOGRAPHY AND FINE NEEDLE ASPIRATION CYTOLOGY IN DIAGNOSIS OF BREAST LESIONS

Thesis

Submitted for Partial Fulfillment of Master Degree in Obstetrics and Gynecology

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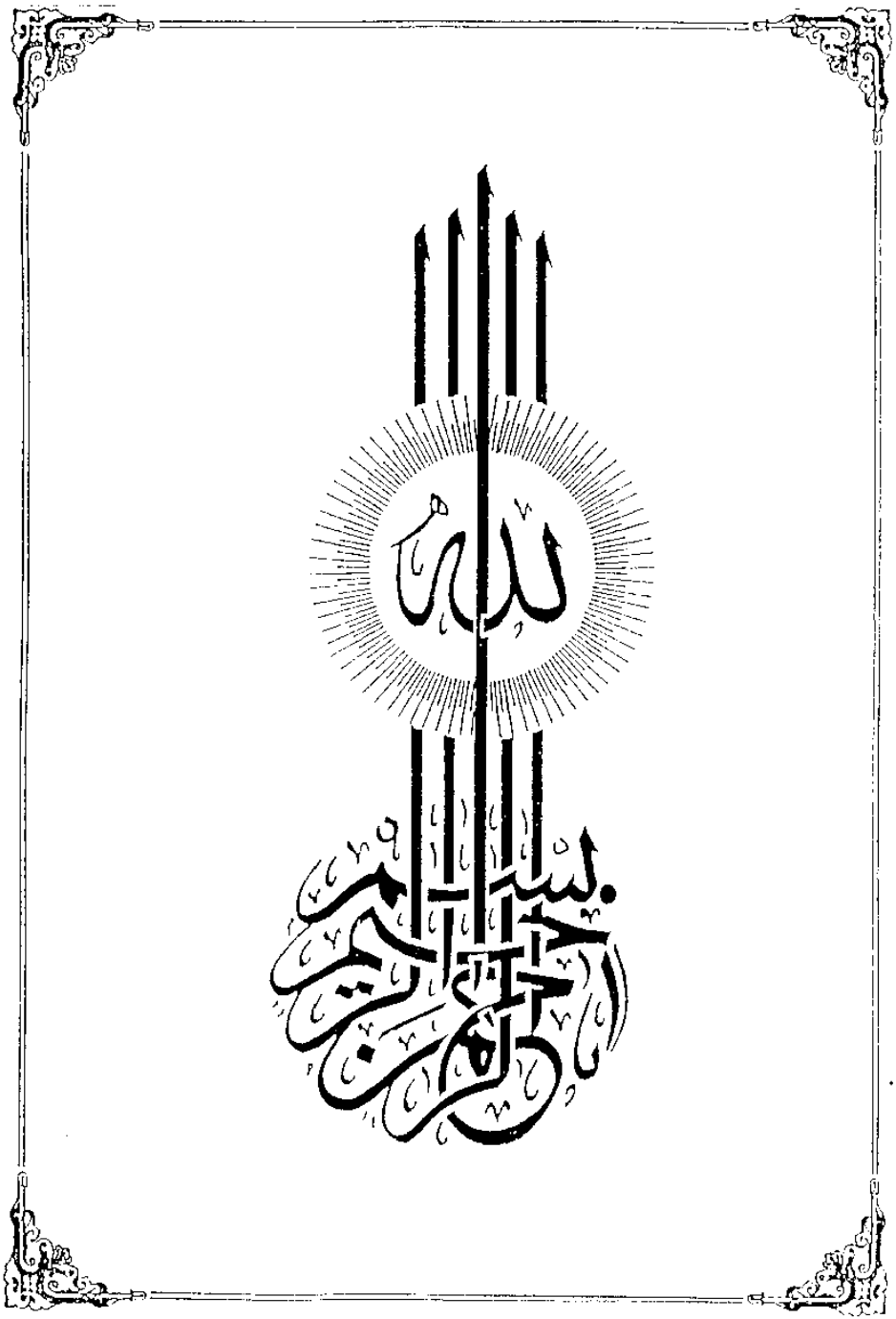

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Abbreviation

ABC	: Aspiration Biopsy Cytology.
ABOG	: American Board of Obstetrics and Gynecology.
ACOG	: American College of Obstetricians and Gynecologists.
ACR	: American College of Radiology.
ANDI	: Aberration of normal Development and Involution.
BSE	: Breast Self- Examination.
CBE	: Clinical Breast Examination.
CNBS	: Canadian National Breast Screening.
DCIS	: Duct Carcinoma in Situ.
FNAB	: Fine Needle Aspiration Biopsy.
FNAC	: Fine Needle Aspiration Cytology.
FNCB	: Fine Needle Core Biopsy.
H & E	: Haematoxylin and Eosin.
IDC	: Invasive Duct Carcinoma.
ILC	: Invasive Lobular Carcinoma.
LCIS	: Lobular Carcinoma in Situ.
MGG	: May Grunwold Giemsa.
MRI	: Magnetic Resonance Imaging.
NCRP	: National Council on Radiation Protection and Measurements
NOS	: Not Otherwise Specified.
USA.	: United States of America.
WHO	: World Health Organization.

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INTRODUCTION

In the past few years, there has been a trend towards performing breast biopsies on an outpatient basis under local anathesia rather than using the traditional 1-stage in patient approach ***(Lannin, 1986)***. This allows a patient with breast cancer to know the diagnosis and decide on the type of definitive treatment before receiving a general anesthetic. However, there are some disadvantages to open incisional outpatient biopsy, namely, the discomfort and increased cost of two operative procedures rather than one ***(Lannin, 1986)***.

More than half a million breast biopsies are performed yearly, and approximately 80% of these will reveal benign changes. The need for cutting the cost of treatment has led to interest in alternative methods to open biopsy that could provide definitive diagnosis of breast cancer. Fine needle aspiration (FNA) represents such an alternative technique. ***(Winchester et al., 1983), (Layfield et al., 1993)***.

Lannin et al., (1986) report significant cost saving when FNA is used as the initial diagnostic test compared with routine outpatient biopsy, or routine inpatient biopsy.

Because FNA is a minimally invasive procedure and leaves no visible scar, it represent an excellent technique to diagnose breast disease in young and old women with multiple nodules ***(Sickles et al., 1980)***.

Some suggest the "Triple diagnosis technique" as a strategy for improving diagnostic accuracy ***(Hermansen et al., 1987) (Kreuzer et al., 1976)***. This approach combines the findings of physical breast examination, mammography, and aspiration cytologic analysis to determine the diagnosis and assess the need for open biopsy. This "Triple diagnosis" strategy reduces the number of open biopsies by 50% while increasing the diagnostic sensitivety rate to 98.8%. This level of diagnostic sensitivity parallels that achieved by frozen section ***(Layfield et al., 1989) (Thomas et al., 1990)***, and open biopsy ***(Grady et al., 1988)***.

In response to the increasing frequency with which women are consulting their obstetrician-gynecologists about concerns related to their breasts, the American Board of obstetrics and gynecology (ABOG) has propagated specific educational requirements for resident training in the various aspects of diagnosing and treating

breast disease, as technical proficiency in cyst aspiration, fine-needle aspiration (FNA) and fine-needle core biopsy (FNCB) which are essential for the proper evaluation, and treatment ***(Green, 1996)***.