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**PATTERNS OF AXILLARY LYMPH NODE
METASTASIS FROM BREAST CANCER**

*Prospective Study
Thesis*

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محضر

أجتماع لجنة الحكم على الرسالة القديمة من
الطبيب / د. محمد عبد الحليم
توطئة للحصول على درجة الماجستير / د. محمد عبد الحليم
في الجراحة العامة

تحت عنوان : باللغة الانجليزية : Patterns of Axillary Lymph Node Metastasis From Breast Cancer

: باللغة العربية : أنماط انتشار العقد الليمفاوية الإبطية من سرطان الثدي

بناءً على موافقة الجامعة بتاريخ ١٩ / ١ / ١٩٩٠ تم تشكيل لجنة الفحص والمناقشة للرسالة

- المذكورة أعلاه على النحو التالي :-
- (١) د. محمد عبد الحليم قراة
 - (٢) د. محمد بسيام رئيس
 - (٣) د. محمد عبد الحليم و د. عبد الله

بعد فحص الرسالة بواسطة كل عضو منفردا وكتابة تقرير منفرد لكل منهم لإتخاذ اللجنة مجتمعة قرار

بهم - بتاريخ ١٩ / ١ / ١٩٩٠ بقرار - مدع

بكلية الطب - جامعة القاهرة وذلك لمناقشة الطالب في جلسة علنية في موضح الرسالة والنتائج التي توصل

إليها وكذلك الأسس العلمية التي قام عليها البحث .

قرار اللجنة : قبول الرسالة

توقيعات أعضاء اللجنة :-

المقرن المحقق

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(صام)

المتن المدخل

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المتن الخارجى

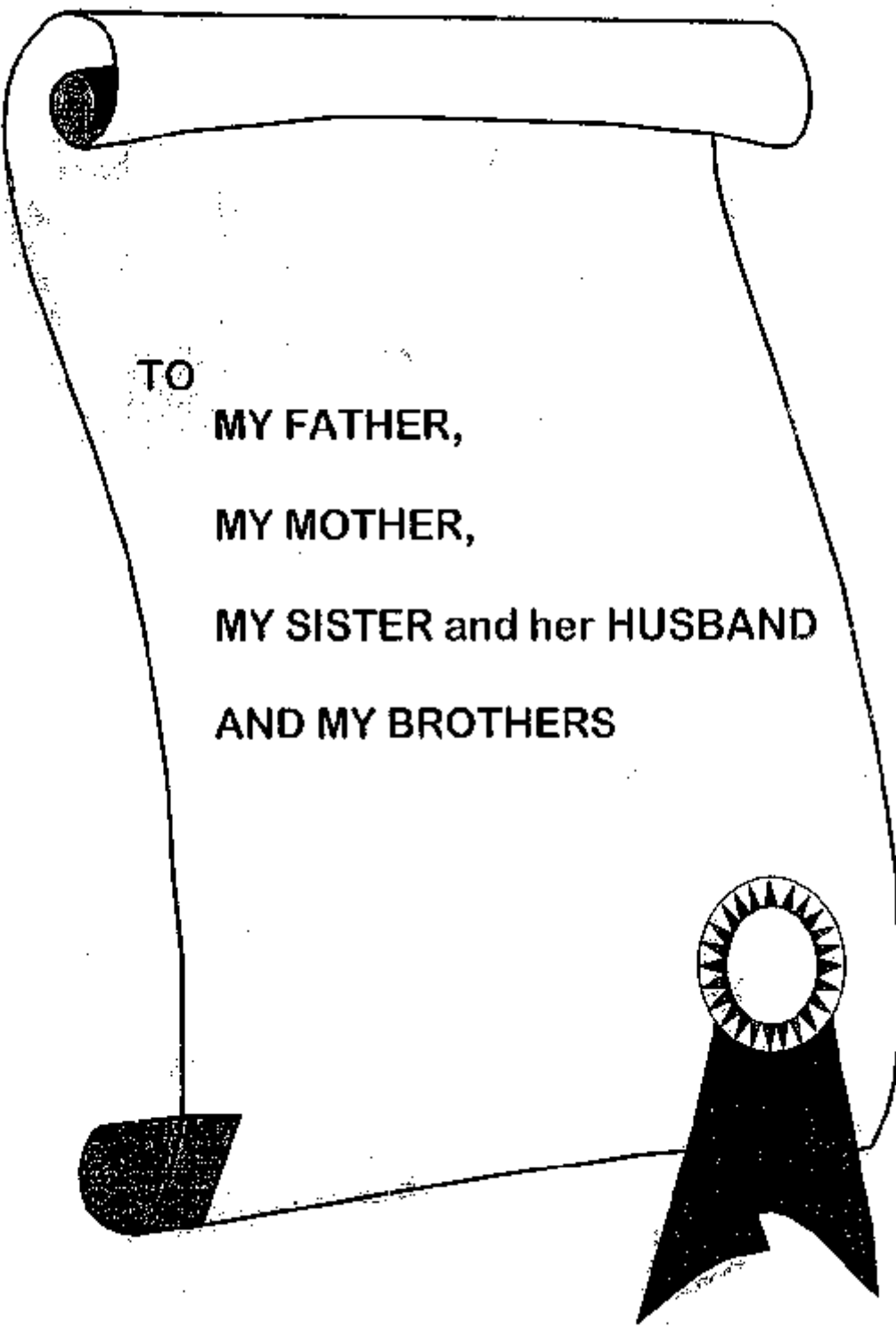
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A black and white line drawing of a scroll. The scroll is unrolled, showing a central area with text. The top of the scroll is rolled up into a cylinder. A ribbon is tied around the bottom of the scroll, forming a bow. The ribbon has a circular head with a sunburst or starburst pattern.

TO
MY FATHER,
MY MOTHER,
MY SISTER and her HUSBAND
AND MY BROTHERS

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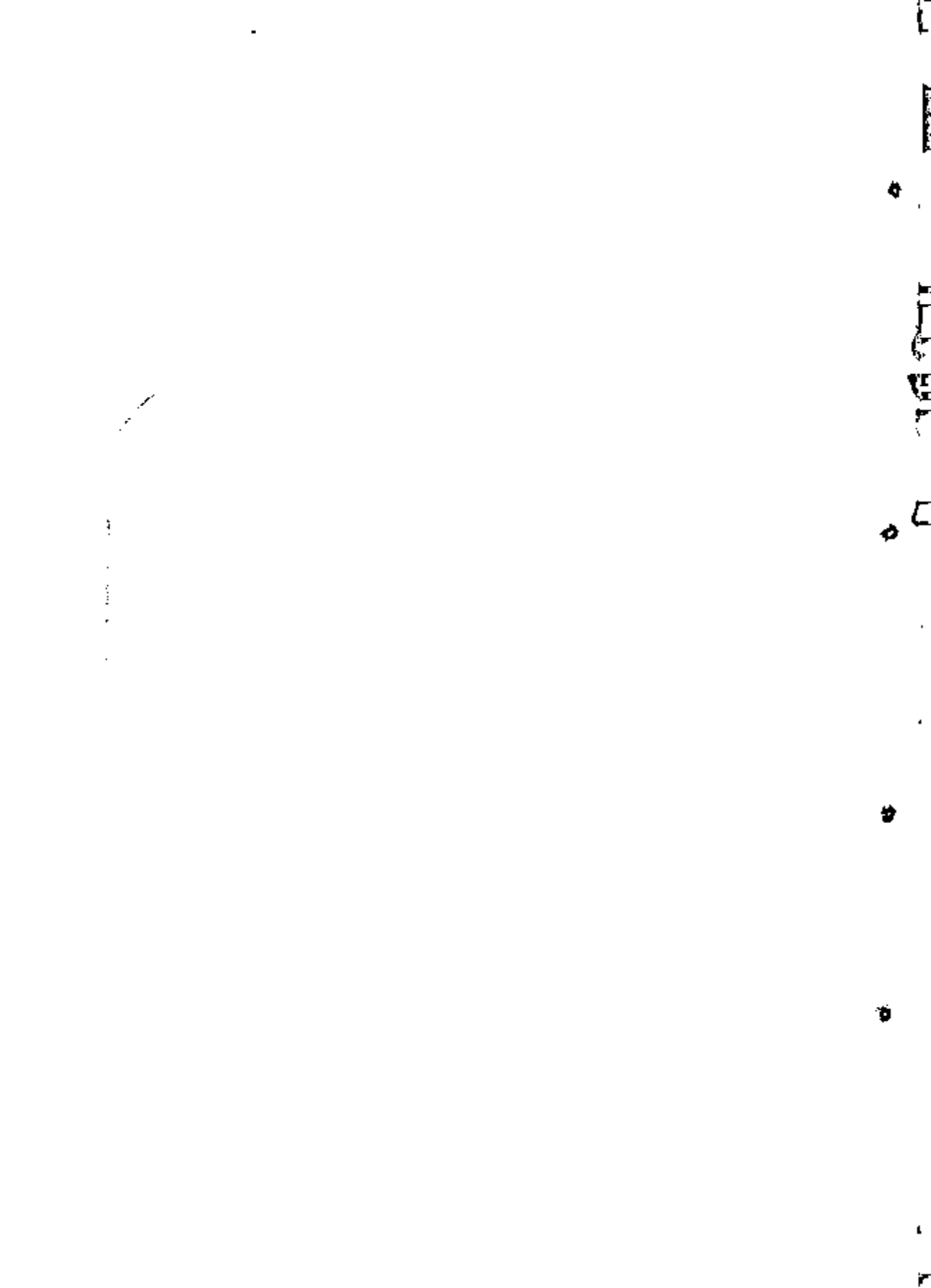
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INTRODUCTION
&
AIM OF THE WORK

INTRODUCTION AND AIM OF THE WORK

No single statistic describes the status of breast cancer relative to other cancers. On the one hand, it is the most common cancer among women, contributing 30% of all female cancers. It is most common in USA and least common in Japan. The median age is 50 years, and the majority of patients in the West are postmenopausal (67%). Female to male incidence is 50:1 (*Nabil El-Bolkainy, 1998*).

It is estimated that breast cancer will be diagnosed in 183,000 American women in 1994, and the incidence has been increasing at an annual rate of 1.2% since 1940. Between 1982 and 1986, the rate of increase was 4% per year. Since 1940, breast cancer mortality has also increased, but more slowly.

In fact, breast cancer mortality has been stable since 1950, but this overall figure masks a 15% increase among women 55 years of age and older a concomitant 15% decrease among those younger than 55 (*Harris et al., 1992*).

An estimated 46,300 American will die of breast cancer in 1994, and it is the leading cause of death among American women aged 40 to 55. However, lung cancer is now a greater contributor to cancer mortality among women of all ages (*Craig, 1995*).

Breast cancer and colorectal cancer are two of the commonest cancers in the UK, with an annual incidence of about 43 and 50 per 100,000 of the population respectively (*Office of Population Censuses and Surveys, 1997*).

The mortality of breast cancer is high, with approximately 15,000 breast cancer patients dying per year (*1992 World Health Statistics Annual, 1993*).

second. In Egypt, breast cancer constitutes 33% of all female cancers at The National Cancer Institute and 50% in private series. The median age is 46 years, one decade younger than the corresponding age in Western countries. The female to male ratio is 44:1 (*Nabil El-Bolkainy, 1998*).

third. In Egyptian patients, 60.5% of patients are premenopausal (age 50 years and younger) and is biologically more aggressive disease than that encountered in the West. This is explained partly by the predominance of premenopausal patients, and partly by the late presentation of patients at an advanced stage. Moreover, inflammatory type of breast cancer is relatively more frequent (*Nabil El-Bolkainy, 1998*).

fourth. Treatment of the axilla with either radiotherapy or surgery remains an integral part of the management of patients with invasive breast cancer.

In general, the standard treatment of the axilla involves a partial axillary lymph node dissection (surgical clearance of axillary nodes from levels I and II). There is as yet no evidence that axillary treatment improves survival, but the issue remains controversial. Of greater concern is the ability of a level I/II dissection to provide adequate regional control in a group of patients who, overall, have a 32% rate of pretreatment level III nodal metastases. A less complete axillary procedure is associated with a higher rate of axillary failure (*Benson and Thorogood, 1986 and Stewart et al., 1994*).

fifth. Level III dissection is probably superior to radiotherapy in preventing axillary relapse (*Fisher et al., 1985*), when it occurs a miserable condition that is difficult to treat (*Recht et al., 1991; and Hoskin et al., 1992*).

Axillary lymph node dissection is an effective staging procedure and is essential for local control of disease in axilla, although, with increased emphasis on mammographic screening and early detection, the incidence of node-positive breast cancers is decreasing. Today, only about 30% to 40% of all invasive breast cancers are node-positive (*Jatoi, 1999*).

The clinical staging of the regional lymphatic in patients with breast carcinoma is currently receiving much attention in the medical literature (*Dale and Williams, 1998*).

The value of axillary dissection is to provide accurate prognostic information as well as excellent local control and to improve the survival rate in node positive group (*Moore and Kinne, 1997*).

Furthermore, *Dowlatshahik et al., (1997)* added that the presence or absence of regional lymph node metastasis has been one of the most important determining factors in recommending adjuvant chemotherapy for patients with breast carcinoma.

Sosa et al., (1998) suggested that improved survival is associated with a more complete axillary lymph node dissection in patients with stage-I breast cancer.

For diagnosis, the surgeon should provide the pathologist with a specimen containing at least 10 lymph nodes (*Cady and Sears, 1986*).

There is a 25-30% error in the clinical staging of the axilla that is 25% of palpable nodes will be an uninvolved on histological analysis, while 30% of axilla with no palpable nodes will be involved. As a consequence, axillary dissection has been the standard method to evaluate axillary node involvement (*Ruben et al., 1988*).

However, variations in axillary anatomy have not been described in most texts of operative surgery or anatomy (*Kutiyanawala et al., 1998*).

So, come the importance to determine the potentially involved groups of axillary lymph node in patients with breast carcinoma.

Hence, the aim of this work is to highlight on the pattern of axillary node metastasis in-patients with breast cancer. Moreover, to detect any variations in the sites of lymph node groups to be involved.