



شبكة المعلومات الجامعية

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شبكة المعلومات الجامعية  
التوثيق الالكتروني والميكروفيلم



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# جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
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# بعض الوثائق الأصلية تالفة

# بالرسالة صفحات نم ترد بالاصل

# Malignancy Risk Factors in Female Pelvic Tumors

Thesis

616, 99496

Submitted to the Faculty of Medicine in partial fulfillment of the requirements of the M.D. degree in Obstetrics & Gynaecology

by

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1995

بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ

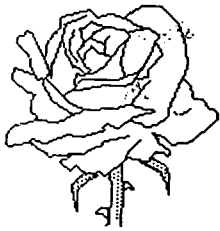
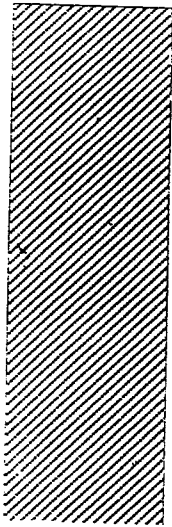
﴿وَمَا أُوتِیْتُمْ مِنَ الْعِلْمِ إِلَّا قَلِیْلًا﴾

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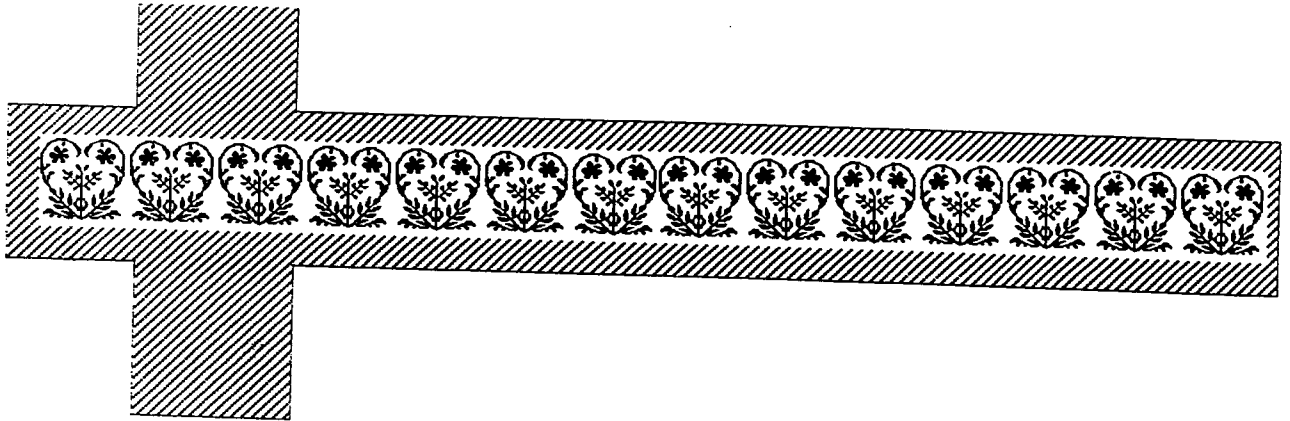
(سورة الإسراء الآية ٨٥)

*" Of knowledge it is only a little that is  
communicated to you"*

( Al- ISRĀ 17; 85)



*TO  
MY FAMILY*





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# ***INTRODUCTION***

## INTRODUCTION

In a patient with a palpable adnexal mass, the optimal diagnostic and therapeutic approach depends on the likelihood that the mass is malignant. It is beneficial for the surgeon to anticipate carcinoma of the ovary before an operation so that adequate procedures can be planned. Neoplasms of the ovary present an increasing challenge to the physician. (*Kurjak & Zalud 1993*).

Ovarian cancer, being a disease that presents late and responds poorly to treatment, is the most lethal of the gynaecologic cancers. Primary ovarian cancer is an insidious and intractable disease that may originate from different types of cells. In spite of the intensive efforts to improve treatment of the established disease with advances in surgical and chemotherapeutic techniques, the overall 5 year survival rates have ranged between 20% and 25% in most studies (*Ozols 1992*).

So the early detection of ovarian cancer becomes the next focus of efforts to reduce premature death among women. Recent advances in immunological techniques have raised hopes that an ovarian cancer-specific antigen may be identified. One of the most encouraging tumour-associated antigens investigated in relation to ovarian cancer is CA125. However, it is important to recognize the limitations of CA125; although the majority of patients (80%) with ovarian epithelial carcinoma have preoperative CA125 level above 35 U/mL, mucinous, border line and germ cell tumours of the ovary do not consistently produce elevated CA125 levels. In addition some benign disease states are associated with CA125 elevations (*Oram & Jacobs 1987*).

Ultrasonography is more sensitive than pelvic examination in detecting ovarian abnormalities but lacks specificity in distinguishing benign from malignant ovarian lesions. Combined with CA125 levels, ultrasonography may provide an effective screening

tool. *Finkler et al. (1988)* recommended the use of CA125 in conjunction with ultrasound to evaluate ovarian masses, in that a level greater than 35 U/mL in a postmenopausal patient with adnexal mass is very predictive of an invasive lesion.

*Bourne et al. (1989)* represented an advancement in the ability to distinguish benign from malignant lesions of the ovary. This technique uses a colour Doppler scanner to evaluate the intra-ovarian vasculature, the premise being that malignant neoplasm should demonstrate increased vascularity (neovascularization) with lower blood flow impedance when compared with benign lesions or normal ovaries.

Also magnetic resonance imaging (MRI) is a suitable imaging modality for the investigation of ovarian pathology. Both ultrasound & CT have limitations in this respect and MRI's ability for tissue characterization as well as providing morphological information is well demonstrated. *Johnson et al. (1984)* were the first to demonstrate the potential value of MRI in assessment of benign and malignant ovarian diseases. Although the normal ovary may be on occasions difficult to identify, pathology of the ovary changes its appearance.

*Jacobs et al. (1990)* demonstrated that 3 criteria could be combined in a risk of malignancy index (RMI) which is simply calculated using the product of serum CA125 level (U/mL), the ultrasound scan result (expressed as a score of 0, 1, 3) and the menopausal status (1 if premenopausal and 3 if postmenopausal). This index was statistically virtually as effective a discriminant between cancer and benign lesions.

***AIM OF THE WORK***