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شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم



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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



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شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
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بالرسالة صفحات لم ترد بالأصل



Role of Color Doppler Ultrasound In Diagnosis Of Ovarian Masses

Essay

*Submitted in partial fulfillment for the master
Degree in obstetric & Gynaecology*

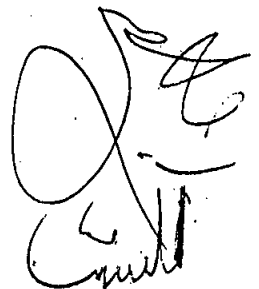
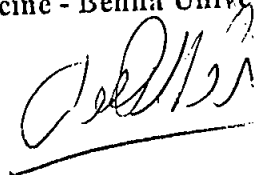
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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا
إِنَّكَ أَنْتَ الْغَلِيمُ الْحَكِيمُ

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Rania Saleh El-Said Mohamed

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ABBREVIATIONS

ARF	acute renal failure
ATN	acute tubular necrosis
CA125	Cancer Antigen 125
CCD	conventional color Doppler
CDI	Color Doppler imaging
CDS	Color Doppler sonsography
CT	Computerized tomography
CW	Continuous wave
3DPD	3-dimensional power-Doppler
5'-DFUR	5'-deoxy-5-fluorouridine
D/A ratio	Diastolic to average
5-FDUMP	5-fluoro-2'-deoxyuridine 5- monophosphate
5-FU	5-fluorouracil
FSH	Follicle stimulating hormone
GCT	Granulosa cell tumor
HRS	Hepatorenal syndrome
HUS	Hemolytic-uremic syndrome
ICC	Intraclass correlation coefficients
LH	Lutinizing hormone
MEDV	Maximum end diastolic velocity

MRI	Magnetic resonance imaging
PCOS	Polycystic ovary syndrome
PD-ECGF	platelet-derived endothelial cell growth factor
PDI	Power Doppler index
PI	Pulsatility index
PN	Panarteritis nodose
PSV	Peak systolic velocity
ROI	Region of interest
R1	Resistance index
SMS	Sonographic morphology scores
TAF	Tumor angiogenesis factor
TAMXV	Time average maximum velocities
TP	Thymidine phosphorylase
TS	Turner syndrome
TTP	Thrombocytopenic purpura
TVS	Transvaginal sonography
VEGF	Vascular endothelial growth factor

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INTRODUCTION

Transvaginal imaging is achieved with greater resolution and allow closer proximity to the uterus, ovaries and pelvic vessels compared with transabdominal methods. More information can be obtained by using Doppler ultrasound than could previously be gained only by morphological study. Color Doppler indicates direction, velocity and type of blood flow where as pulsed Doppler enables quantification of such flow. However, the combination of high quality B-mode images, pulsed Doppler and color coded Doppler flow imaging in the same vaginal probe produces a super simultaneous picture of morphological and blood flow information from female pelvic circulation (*Kurjak, and Zalud, 1991*).

Doppler waveform analysis of ovarian tumor blood flow by transvaginal ultrasonography may help to differentiate malignant from benign tumors of the ovary. In young patients presenting with a solid adnexal mass, intratumoral Doppler waveform investigation might offer some help for earlier prediction of rare malignant tumors like fibrosarcomas (*Williams et al., 1992*).

During the reproductive years, most ovarian masses are benign. About two thirds of ovarian tumors are encountered during reproductive age. In terms of assessing ovarian masses by pelvic

examination, masses that are unilateral, cystic, mobile and smooth are most likely to be benign whereas, those that are bilateral, solid fixed, irregular, and associated with ascites, culde-sac nodules, and rapid rate of growth are more likely to be malignant (*Hillard, 1996*).

The use of reproducible sonomorphologic criteria in premenopausal women with ovarian cysts proved to be efficient to reduce number of unnecessary operations and to evaluate risk of malignancy (*Osmers et al., 1996*). Malignant ovarian tumors, present a serious problem in terms of both detection and management and so, it is necessary to have a better understanding of the biology of the disease. Unfortunately, the pre-cancerous lesion of the ovary is not defined yet (*Kurjak, 1991*).

The early diagnosis of malignant ovarian tumors is a matter of chance rather than a scientific method. Also the methods of early diagnosis are extremely limited. A cancerous tumor 1cc in size contains about one billion cells, each potentially capable of originating a new focus of cancer. This capacity of cancer cells to grow and disseminate makes early diagnosis so important (*Barber, 1984*).

Consequently, methods that improve the early detection of malignant ovarian neoplasms should have a profound effect on the mortality of the disease. It has been estimated that the 20% of malignant ovarian neoplasm cases that are currently detected as stage I