hossam maghraby

شبكة المعلومات الجامعية

بسم اللّه الرحمن الرحيم

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شبكة المعلومات الجامعية

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 علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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بالرسالة صفحات
لم ترد بالأصل

Role of color Doppler ultrasonography in assessment of benign and malignant breast tumors

Thesis
submitted for partial fulfillment of
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in
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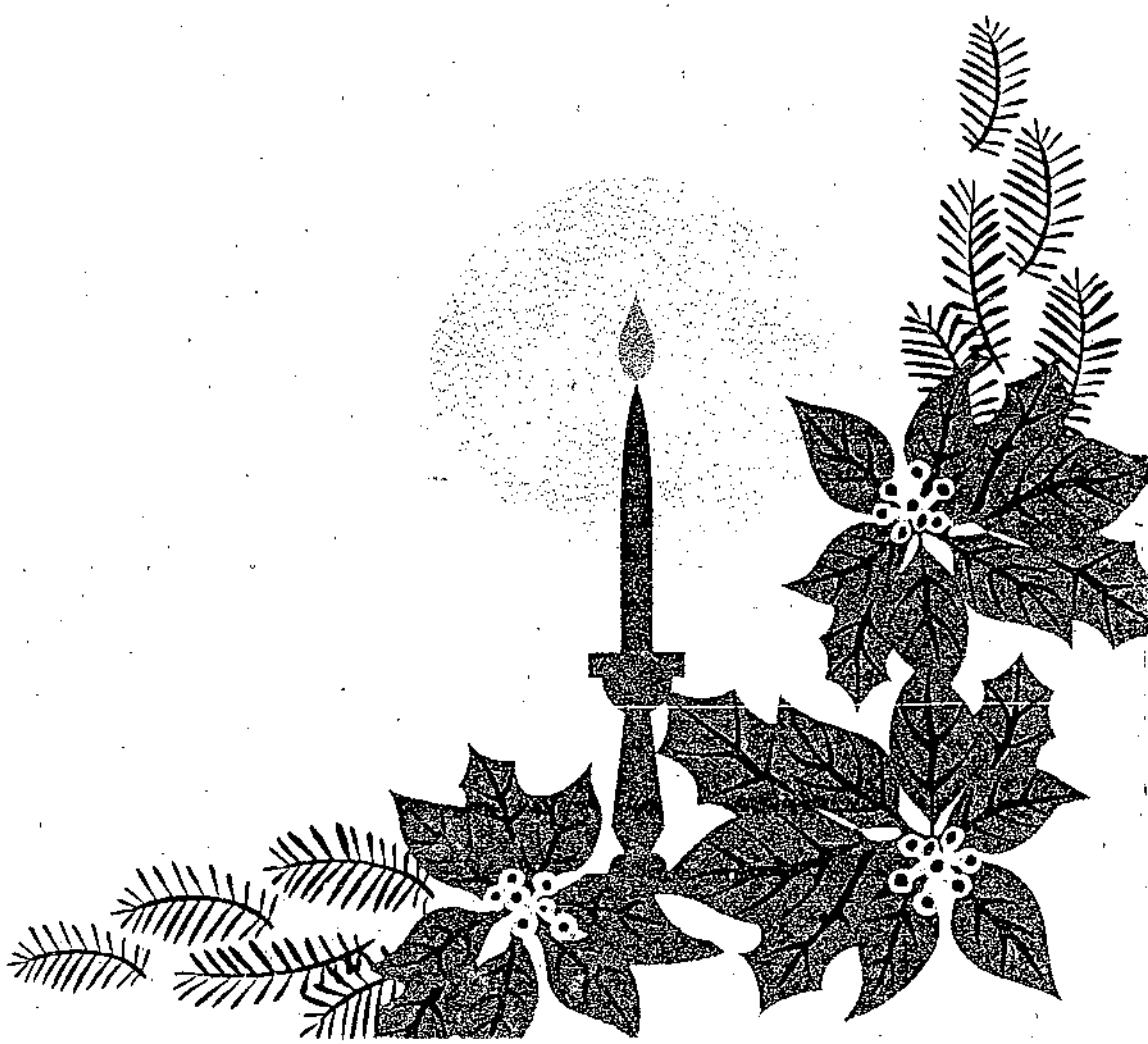


Introduction

Breast cancer causes 20% of cancer deaths among females and has been called the *"foremost cancer"* in women. It is both ironic and tragic that a neoplasm arising on an exposed organ, readily accessible to self-examination and clinical diagnlosis, continues to exact such a heavy toll ***(Marshall, 1993).***

Carcinoma of the breast is the leading cause of cancer in women in the United States. Until recently, the incidence has been increasing, with 180,300 cases anticipated this year ***(Breast imaging reporting and data system BI-RADS, 1993).***

All women have a baseline of developing breast cancer of 5-6%, and approximately 50% of these women will die from the disease, a subsegment of the population is at an additional risk of one chance in ten (10%) of developing breast cancer during the course of lifetime ***(Kopans, 1989).***

The breast in women represents motherhood, sexuality, and infant nutrition. These special features heighten the tragedy and challenge of diagnosing and treating breast cancer ***(Anderson, 1992).***

The search for non-invasive diagnostic procedure that can further differentiate mammographically detected abnormalities –as color Doppler modality- must increase and continue ***(Youssefzadeh et al. 1996).***

In the breast, several favorable factors combine to make this one of the most promising applications of Doppler, of these factors; the ultrasound beam has to penetrate for only a few centimeters, thus high frequencies can be used for Doppler studies, this improve the ability to detect low-velocity flow of tumor vessels. Also unlike many areas in the body specially the abdomen, interference from unwanted signals due to cardiac and respiratory movements is minimal ***(Merritt, 1987 and Nelson & Pretorious, 1988).***

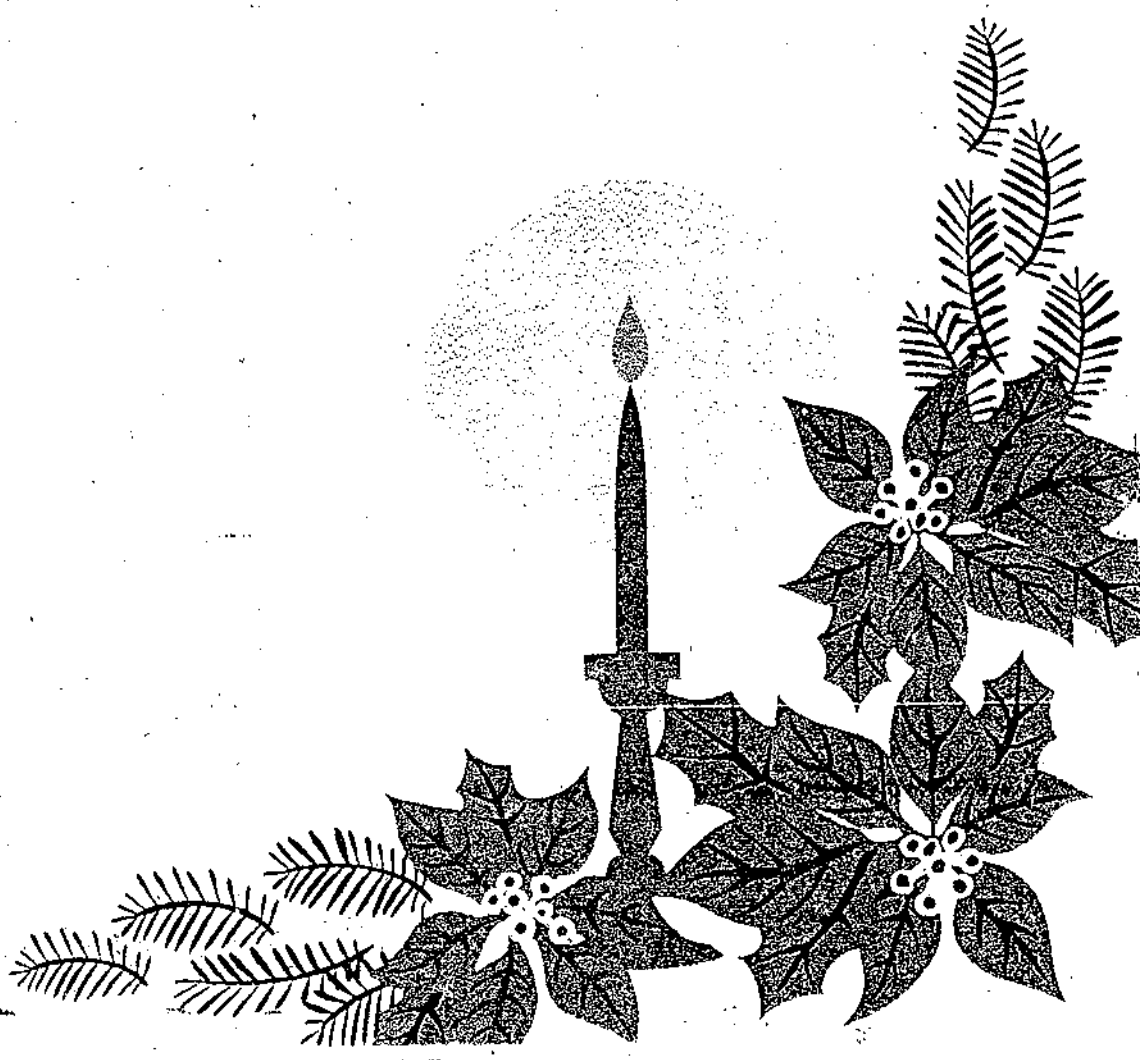
Doppler has emerged as a promising addition to imaging in detection and differential diagnosis of breast problems because the periphery of malignant lesions is vascularized while most benign processes are hypovascular ***(Nicolas and O'rourke, 1990)***.

In breast masses color Doppler proved to be of value, partly because of the direct display of vessels it provides but also because of its apparent sensitivity in detecting low-volume and low-velocity flow, so that minute vessels are readily demonstrated both around and within breast masses ***(Cosgrove et al. 1990).***

Angiogenesis is an essential condition for tumor growth; therefore it seems to be of interest to prove if blood flow and vascularization of breast tumors would give information concerning this issue ***(Grischke et al. 1996).***

Highly significant differences between benign and malignant breast tumors were found for all Doppler flow data ***(Majar et al. 1997).***

Aim of the Work



Aim of the Work

To find out the differences in the patterns of color Doppler ultrasonography in benign and malignant breast tumors.