

In the name of Allah, the Beneficent the Merciful
Sudan University of Science and Technology (Sudan)
College of Graduate Studies

With collaboration of

Afro-Asian Institute of Medical Sciences
Lahore - Pakistan

Role of Ultrasound in Differential Diagnosis of
Different Breast Lesions

A thesis submitted for partial fulfillment of M.Sc in
Medical Diagnosis Ultrasound

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This thesis is dedicated to my parents who are always with me in all struggles of my life. I am thankful to my father of his blessed prayers and all type of support and guidance at all the times of my life. I am also thankful to the enthusiastic support which I got from my brother and sisters.

Dr. Sheema.Mir

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Dr. Sheema Mir

I have gone through the thesis on Role of Ultrasound in differential diagnosis of breast lesions, prepared by Dr. Sheema Mir and I found it satisfactory for submission. I wish her best of luck with excellent carrier as an expert Ultrasonologist.

Prof.Dr.Syed Amir Gilani

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ملخص الدراسة

الهدف من هذه الدراسة هو تقييم و ر الموجات فوق الصوتية في تشخيص آفات الثدي.

تم عمل فحص بالموجات فوق الصوتية في عدة مراكز بمدينة لاهور بباكستان في الفترة من الأول من يونيو 2005 حتى الثلاثين من أكتوبر

2005 في:

— المعهد الآفوي آسوي للعلوم الطبية

— مركز جيلاني للموجات فوق الصوتية — لاهور — باكستان

تم اختيار 500 مريض عشوائيًا ولوح عملهم بين: أقل من عشرون، وأكثر من خمسون سنة.

تم فحص المرضى روتينيًا وتم متابعتهم فوريلو كانت النتيجة كالآتي:

— نسبة الأورام الحميدة 80.8%

— نسبة الأورام الخبيثة 11.5%

— و نسبة 7.6 يشك في تشخيص احتمالية اصابتهم.

— تليف الغدد هي الأكثر حلوًا كانت نسبتها 57.2%

— الأورام الخبيثة الأكثر حلوًا هي سرطان قنات الثدي كانت نسبته 67%

— أما آفات الحويصلات البسيطة والتي تعتبر الأكثر حلوًا فكانت نسبتها 50%

نجد أن التصوير بالموجات فوق الصوتية من أكثر أنواع الفحوصات التي تجرى للثدي دقة في التشخيص اضافته الى انها موفيه ، رخيصه و غير ضله بالمريض .

ساعدت تقنية الأوضاع الجديدة والأجهزة المحمولة بطاقة ولأنه الوابلارو أجهزة الموجات الصوتية ذات الأبعاد الثلاثة في تشخيص آفات الثدي.

و بالتالي ساعدت هذه النتائج في تطوير العناية بالمريض ، تقليل إزعاج المريض ، الأواض الخبيثة والفناء أو إجراء تقليل تكاليف القطاع الصحي.

OBJECTIVE: The purpose of this study was to determine role of ultrasound in diagnosis of breast lesions. The study was performed in different centers in Lahore, Pakistan, from 1st February 2005- 30 October 2005. The centers are Gilani Ultrasound Center and Afro-Asian Institute of Medical Sciences.

I Scanned 500 cases of age less than 20 and above 50 years.

Routine scan is done and followed up. The Results are as follow;

The Solid lesions were 26(76%)

Benign ----- 21/26 (80.9%).

Malignant ----- 3/26 (11.5%).

Doubtful Diagnosis ----- 2/26 (7.6).

Out of benign, 9 were abscesses (42.8%).

Cases of fibroadenomas were 12 (57.2%).

Cases of Malignant lesions were 3 (11.5%).

Solid Invasive ductal Carcinomas were 2 (67%).

Invasive lobular Carcinoma was 1 (33%).

Non-Infiltrating lesions ----- Nil

Cystic lesions were 6 (17%).

Cases of Simple cyst were 3 (50%).

Complex cyst was 1 (16%).

Fibrocystic lesions were 2 (34%).

Where as out of total lesions simple cysts were 8.8%, complex cysts were 2.9% and Fibrocystic lesions were 5.8%.

The use of 3D ultrasound, color Doppler and power Doppler machines increase the sensitivity of detection of breast lesions.

These findings will improve the patient care, increase patient comfortable and decrease malignancy, mortality and finally decreasing the overall cost of health care.

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