



## ***DEDICATION***

My greatest debt is owed to my husband, Mohamed and our Children, Husam, Hashim, and Noor for their encouragement, support and patience.

This Thesis is dedicated to my late beloved son, Abdulrahman.

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# *ABSTRACT*

The enlargement of the breast lymph node is considered as one of the factors that indicate the presence of breast cancer, as the increase of the lymph node more than 2,5 cm.

It must be considered as malignant. The purpose of this study is to evaluate the importance of using ultrasound in the determination of the enlargement.

Method of study: Breast imaging (mammogram) was done for (50) female patients who have a history of breast cancer or not and then they underwent an ultrasound scan, then the results of the study were analyzed by using the SPSS program version.

The result: Shows that ultrasound scan plays a significant role for enlargement distinction between the benign or malignant enlargement.

Key words: lymph node - breast cancer - mammogram - ultrasound.

## المستخلص

يعتبر تضخم الغدد الليمفاوية المحيطة بالثدي من احدى العوامل التي تشير الى وجود سرطان بالثدي وذلك اذا كان حجم الغدة الليمفاوية يفوق الـ2.5سم يجب النظر بعين الاعتبار في هذه الحالة لمعرفة نوعية التضخم والنظر على أنها غير حميدة، الهدف الرئيسي من هذه الدراسة هو تأكيد اهمية استخدام الموجات فوق الصوتية لتحديد حجم الغدد الليمفاوية وتقييمها من حيث الحميد او الخبيث منها.

طريقة الدراسة:

تم اجراء دراسة تحليلية على عدد من النساء تتراوح اعمارهن بين (40 – 80) عام منهن من كان لديها تاريخ مرض سرطان الثدي ومنهن من ليس لديها تاريخ للمرض.

اجريت الدراسة بإجراء اشعة الثدي للمجموعتين من النساء ثم خضعن لإجراء فحص بالموجات فوق الصوتية تم اجراء الفحص بتطبيق برنامج (SPSS) النسخه 21 .

اثبتت النتائج بعد التحليل بان الموجات فوق الصوتية ذات حساسية فعالة في تميز نوع الورم (التضخم) من ناحية الحميد والخبيث منه.

## **TABLES OF CONTENTS**

<b>No</b>	<b>Subject</b>	<b>Page</b>
	الآية	<i>I</i>
	<i>DEICICATION</i>	<i>II</i>
	<i>ACKNOWLEDGMENT</i>	<i>III</i>
	<i>ABSTRACT</i>	<i>IV</i>
	المستخلص	<i>V</i>
	<i>TABLES OF CONTENTS</i>	<i>VI</i>
	<i>LIST OF FIGURES</i>	<i>IX</i>
	<i>LIST OF TABLES</i>	<i>IX</i>
	<i>LIST OF DIAGRAMS</i>	<i>IX</i>
	<i>LIST OF ABBREVIATIONS</i>	<i>X</i>
	<b>CHAPTER ONE</b>	
<i>1.1</i>	<i>INTERODUCTION</i>	<i>1</i>
<i>1.2</i>	Problem of the study	<i>3</i>
<i>1.3</i>	Objective of the study	<i>3</i>
<i>1.3.1</i>	General objective	<i>3</i>
<i>1.3.2</i>	Specific objectives	<i>3</i>
	<b>CHAPTER TWO</b>	
	<b>Theoretical back round</b>	<b>5</b>
2.1	Anatomy Of The axillary lymph node	5
2.1.2	lymphatic drainage of the upper limb	6
2.1.3	Anatomically it is divided into 6 groups	7
2.1.3.1	Posterior (subscapular)group	7

2.1.3.2	Lateral group	7
2.1.3.3	Central group	7
2.1.3.4	Infraclavicular(deltopectoral) group	7
2.1.3.5	Apical group	7
2.2	Axillary lymph node enlargement	8
2.2.1	Location	8
2.2.2	Lymphatic drainage	8
2.2.3	Common causes	8
2.2.3.1	Bacterial	8
2.2.3.2	Viral	9
2.2.3.3	Malignant	9
2.2.3.4	Fungal	9
2.2.3.5	Antigenic	9
2.2.4	Causes of generalized lymphadenopathy	9
2.2.5	Infection	10
2.2.6	Immunologic or connective tissue disorders	11
2.2.7	Primary disease of lymphoid or reticuloendothelial tissue	11
2.2.8	Immunodeficiency syndromes	11
2.2.9	<i>Metabolic and storage diseases</i>	11
2.2.10	<i>Hematopoietic diseases</i>	12
2.2.11	Other disorders	12
2.3	Axillary lymph node metastases in breast cancer	13
2.3.1	Morbidity following Sentinel Lymph node Biopsy versus	14
2.3.2	Imaging of Axillary Lymph Nodes	14
2.4	Diagnosis	20
2.4.1	Palpation	20
2.4.2	Ultrasonography	20

2.4.2.1	Sonographer Positioning	20
2.4.3	CT scan	23
2.5	Epidemiology and statistics	23
2.6	Clinical features of abnormal lymph node enlargement	23
	<b>CHAPTER THREE</b>	
3.1	Materials and Method	25
3.1.1	Area of the study	25
3.1.2	Study Population	25
3.1.3	Duration	25
3.1.4	Sample volume	25
3.1.5	Imaging methods	25
3.1.6	Equipment selection	25
3.1.7	Scanning directions	25
3.1.8	Criteria of Radiographic assessment	26
3.1.9	Axillary Lymph node Ultra sound	26
3.1.9.1	Role of ultrasound	25
3.1.9.2	Limitations	27
3.1.9.3	Equipment selection and technique	27
3.1.9.4	Patient Positioning	28
3.1.9.5	Data Collection	28
3.1.9.6	Data Analysis	29
	<b>CHAPTER FOUR</b>	
4.1	Data Collection	30
4.2	Data Analysis	30
4.3	Results	30
	<b>CHAPTER FIVE</b>	
5.1	Discussion	33
5.2	Conclusion	35



5.3	Recommendation	36
	References	38
	Appendices	40

### ***LIST OF FIGURE***

Figure	Item	Page no
2.1	Anatomy of axillary lymph node	5
2.2	Presentation of lymphadenopathy by anatomic site	6
2.3	Apical group	8
2.4	GE ultra sound machine	27
2.5	Patient positioning	28

### ***LIST OF TABLES***

Table	Shows	Page No
2.1	Medication That Cause lymphadenopathy	13
4.1	patients have axillary lymph node enlargement due to cancer	30
4.2	patients have axillary lymph node enlargement due to Thalassemia	31
4.3	patients have axillary lymph node enlargement due to infection	31
4.4	patients have axillary lymph node enlargement due to lymphoma	31
4.5	patients have axillary lymph node enlargement due to TB	32
4.6	Following table shows all results	32

### **List of Diagrams**

Diagram No	Diagram Contents	Page No
2.1	Normal breast – axillary lymph node	21
2.2	Lymph node enlargement due to breast cancer	21

2.3	Enlarged lymph nodes with generalized hypechoicity	22
2.4	Lymph node Ultrasounds More Accurate in obese breast cancer patients	22
2.5	Enlarged lymph node in the left axilla	23

## ***LIST OF ABBREVIATIONS***

Abbreviation	Terminology
BSE	Breast self examination
CBE	Clinical Breast Examination
MRI	Magnetic Resonance Imaging
US	Ultrasound
MHz	Megahertz
USG	Ultrasonography
Iso	Signal equal to the surrounding tissue
ACR	American College of Radiology
M	Mammography
ALND	Axillary lymph node dissection
SLN	sentinel lymph node
CT	computed tomography
NPV	negative predictive value
FNAB	fine-needle aspiration biopsy
SPSS	Statistical Package for Social Sciences