



THE ROLE OF DIFFUSION WEIGHTED MRI IN THE DIAGNOSIS AND FOLLOW UP OF BREAST CANCER

Essay

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DEDICATION

*To **My Beloved Mother**, because of you I'm here today and just for you I dedicate every success I achieve in my life , Wish you and **My Father** are proud of me.*

CONTENTS

Subject	Page
<i>List of figures</i>	
<i>List of tables</i>	
<i>Abbreviations</i>	
<i>Introduction and aim of work</i>	1
<i>Anatomy of the breast</i>	3
<i>Pathology of breast cancer</i>	21
<i>DCE MRI of the breast</i>	32
<i>Diffusion weighted imaging of the breast</i>	71
<i>Illustrative cases</i>	110
<i>Summary and conclusion</i>	122
<i>References</i>	124
<i>Arabic Summary</i>	

LIST OF ABBREVIATIONS

ACR : American College of Radiology

ADC: Apparent diffusion coefficient

AJCC :The American Joint Committee of Cancer

BI-RADS: Breast imaging reporting and data system

CE-MRI: Contrast enhanced magnetic resonant imaging

CIS : carcinoma in situ

DCE-MRI: Dynamic Contrast enhanced magnetic resonant imaging

DCIS: Ductal carcinoma insitu

DWI: Diffusion weighted image

DW-MRI: Diffusion-weighted magnetic resonance imaging

FOV: Field-of-view

Gd-DTPA: Gadolinium diethylene triamine penta aceticacid

GE : Gradient echo

IDC : Invasive Ductal carcinoma

IBC : Inflammatory breast cancer

ILC: Infiltrating lobular carcinoma

LCIS: Lobular carcinoma in situ

LIQ: Lower Inner Quadrant

LOQ: Lower Outer Quadrant

M : distant metastases

MIP: Maximum intensity projection

MPR : multi-planar reconstructed

MRA: Magnetic resonance angiography

LIST OF ABBREVIATIONS

MRI: Magnetic resonance imaging

N : lymph node status

NOS: Not otherwise specified

PPV : positive-predictive value

ROI: Region of interest

T : tumor sizeand.

TDLU: Terminal Ductal Lobular Unit

SE : Spin echo

SNR : Signal to noise ratio

UIQ: Upper Inner Quadrant

US : ultrasound

UOQ: Upper Outer Quadrant

WATS : water selective excitation technique

LIST OF FIGURES

Fig. No.	title	Pag. No.
1.	The extent of mammary ridge (mammary line)	4.
2.	Anatomy of the Breast	8.
3.	Quadrant and Clock Divisions of the Breast	8.
4.	Anatomy of the axilla	10.
5.	Arterial supply of the breast	11.
6.	Levels of lymph nodes draining the breast	12.
7.	T1WI showing fat and glandular tissue	14.
8.	T1WI post Gd-DTPA fat sat & T2WI showing breast structures	15.
9.	MRI showing Benign duct ectasia	17.
10.	MRI showing Normal enhancing breast structures	18.
11.	MRI showing Medial breast with chest wall muscles	19.
12.	MRI showing different breast structures	20.
13.	Ductal carcinoma in-situ histopathology	24.
14.	Lobular carcinoma in situ pathology	25.
15.	Invasive Duct Carcinoma histopathology	26.
16.	Invasive Lobular Carcinoma histopathology	27.
17.	Position of the patient in the MRI	34.
18.	MRI breast, High temporal versus high spatial resolution	37.

LIST OF FIGURES

	Images	
19.	MRI T2WI and US of breast cyst	39.
20.	MRI of Multicentric invasive tubular cancer	40.
21.	MRI breast showing different phase-encoding directions	41.
22.	MRI breast showing Benefit of subtraction imaging	42.
23.	MIP DCE-MRI image in invasive ductal carcinoma.	43.
24.	MR mass enhancement	44.
25.	MRI Non mass-like enhancement	45.
26.	MRI of Focus	46.
27.	MRI of invasive ductal cancer.	48.
28.	DCE MRI Type I enhancement curve	49.
29.	DCE MRI Type II enhancement curve	50.
30.	DCE MRI Type III enhancement curve	50.
31.	MRI of invasive ductal carcinoma	57.
32.	MRI of infiltrating ductal carcinoma	57.
33.	MRI of invasive lobular carcinoma	58.
34.	MRI of Ductal carcinoma in situ	58.
35.	MRI of Fibroadenoma	59.
36.	MRI of scar tissue	60.

LIST OF FIGURES

37.	MRI of Intramammary lymph node	60.
38.	MRI of Fat necrosis	61.
39.	Mammography and MRI of Ductal carcinoma in situ	62.
40.	Mammography and MRI of unkown primary proved to be invasive ductal carcinoma	63.
41.	Mammography and MRI of invasive ductal carcinoma	64.
42.	MRI of invasive lobular carcinoma	65.
43.	DCE-MRI image before and after chemotherapy	66.
44.	MRI of breast with An intact silicone gel breast implant	67.
45.	MRI breast with silicone implant showing collapsed shell and extensive extracapsular silicone	67.
46.	MRI of breast showing silicone implants and mass	68.
47.	MRI of recurrent invasive carcinoma	68.
48.	Operated IDC with no recurrence	69.
49.	Effect of diffusion gradients	72.
50.	Changes in ADC value versus changes in b value	75.
51.	Ductal carcinoma in situ Diffusion-weighted images obtained at different b values	76.
52.	CE-MRI ,DWI and ADCmap of IDC with central necrosis	80.
53.	CE-MRI and DWI of IDC with central fibrotic change	83.

LIST OF FIGURES

54.	CE-MRI , DWI and ADC map of non-invasive ductal carcinoma	84.
55.	CE-MRI and ADC map of invasive ductal carcinoma	85.
56.	CE-MRI and DWI of DCIS and fibrocystic disease	87.
57.	DCE-MRI, DWI and ADC map of Ductal carcinoma in situ	88.
58.	DCE-MRI, DWI and ADC map of ductal carcinoma in situ	89.
59.	CE-MRI and DWI of Invasive lobular carcinoma	90.
60.	CE-MRI, MIP, DWI and ADC map of ILC	91.
61.	DCE-MRI, DWI and ADC map of Mucinous tumor	93.
62.	CE-MRI and DWI of Intraductal papilloma	94.
63.	CE-MRI, DWI and ADC map of fibroadenoma	95.
64.	DWI and ADC map of Bilateral multiple fibroadenoma	96.
65.	MRI T2WI and DWI of Benign phyllodes tumor	97.
66.	CE-MRI and DWI of Bilateral fibrocystic disease	98.
67.	CE-MRI , DWI and ADC map of Mastitis	99.
68.	MRI and ADC map of Simple cyst	100.
69.	MRI and DWI of Hemorrhage	101.
70.	CE-MRI , DWI and ADC map of Neoplastic recurrence	103.
71.	CE-MRI and DWI of Radial scar	104.
72.	MRI and ADC map of breast showing responding effect of chemotherapy.	107.
73.	MRI and ADC map of breast showing non responding effect of chemotherapy	107.

LIST OF TABLES

NO.	table	Pag.No.
1.	TNM Staging of breast cancer,Primary tumor.	30.
2.	TNM Staging of breast cancer, Regional lymph nodes	31.
3.	TNM Staging of breast cancer, Distant metastasis	31.
4.	American Joint Committee on cancer stage groupings	31.
5.	Typical Breast MR Imaging Findings in Some Frequent Breast Diseases	55.

INTRODUCTION

ANATOMY OF THE BREAST

PATHOLOGY OF BREAST CANCER

DCE-MRI OF THE BREAST