

Role of PET/CT versus MRI in diagnosis, staging and follow up of Breast Cancer

Essay

Submitted for partial fulfillment
of Master degree in Radio-diagnosis

Presented by

Dalia Wageeh kamel

M.B.B.CH

Faculty of Medicine –Ain shams university

Supervised By

Prof. Dr. Sahar Farouk Shaaban

Professor of Radio diagnosis

Faculty of Medicine

Ain Shams University

Dr. Amr Mahmoud Ahmed

Lecturer of Radio diagnosis

Faculty of Medicine

Ain Shams University

Faculty of Medicine

Ain shams university

2010

مقارنة دور التصوير المدمج بالإنبعاث
البوزيتروني المقطعي و الأشعة المقطعية
بالرنين المغناطيسي في تشخيص و تقييم
ومتابعة أورام الثدي

بحث

توطئه للحصول علي درجة الماجستير في الأشعة التشخيصية

مقدم من

الطبيبة / داليا وجيه كامل

بكالوريوس الطب و الجراحة

كلية طب – جامعة عين شمس

تحت إشراف

الأستاذة الدكتورة / سحر فاروق شعبان

أستاذ الأشعة التشخيصية

كلية طب – جامعة عين شمس

الدكتور/ عمرو محمود أحمد

مدرس الأشعة التشخيصية

كلية طب – جامعة عين شمس

كلية طب

جامعة عين شمس

2010



Acknowledgement

First and above all, thanks to merciful GOD, who enabled me to complete this work.

Grateful thanks to Professor Dr. Sahar Farouk Shaaban Professor of Radiodiagnosis, Ain Shams University, for her great experience, kind heart, great help and assistance, valuable instructions and I will always remain grateful.

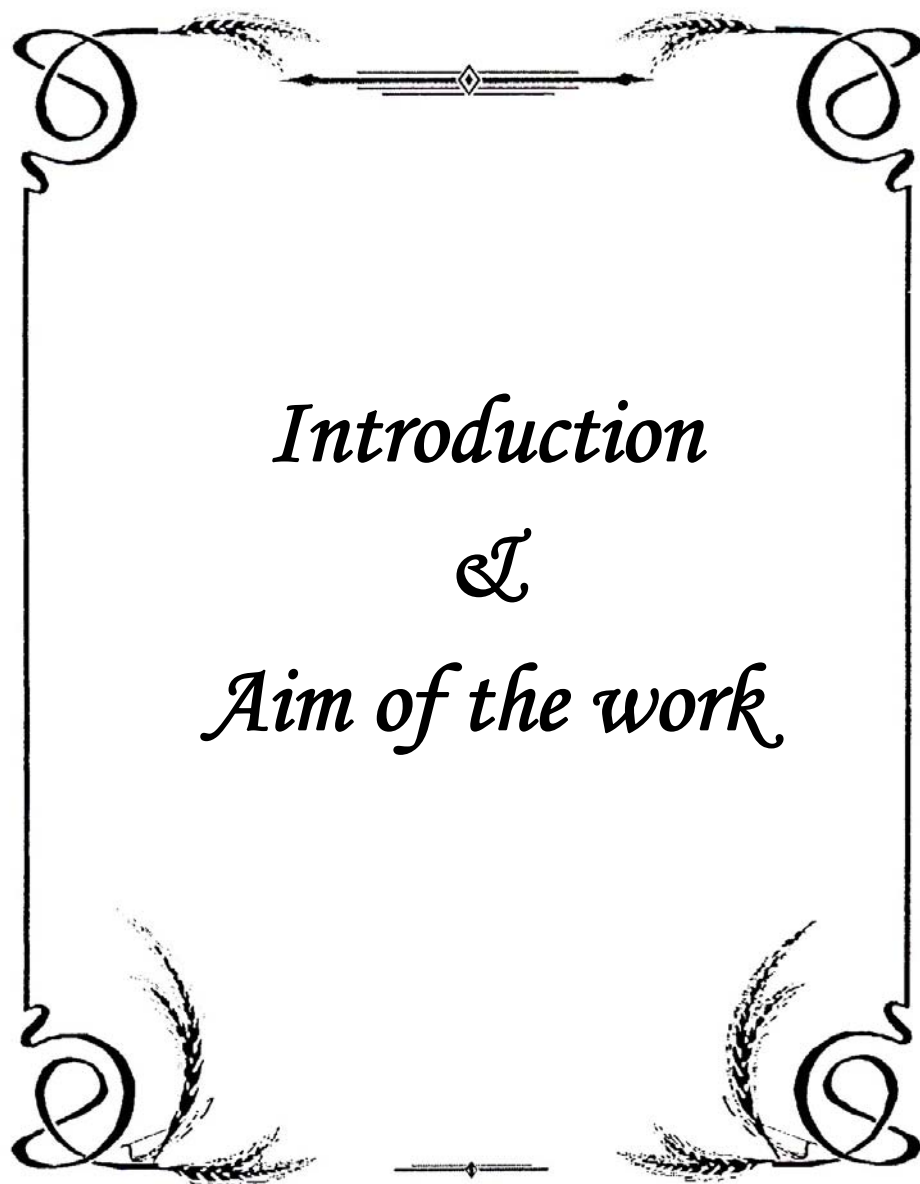
I would like to express my deepest gratitude to Dr. Amr Mahmoud Ahmed, Lecturer of Radiodignosis, Ain Shams University, who honored me by his kind help and endless support.

Many thanks to my dear husband and my beloved daughter for their grateful help and support. Also I want to thank my parents for their great help. Finally, I would like to thank all members of the radiology department, Ain Shams University



Contents

	Page No.
▪ Introduction and aim of the work.....	1
▪ Anatomy of the breast	4
▪ Pathology of the breast cancer.....	26
▪ Technical aspects of PET/CT.....	58
▪ Technical aspects of MRI.....	102
▪ PET/CT manifestations of breast cancer.....	135
▪ MRI manifestations of breast cancer.....	167
▪ PET/CT versus MRI in management of breast cancer.....	188
▪ Summary and conclusion.....	205
▪ References.....	209
▪ Arabic summary.....	1



Introduction
&
Aim of the work

*Anatomy of the
breast*

*Pathology of breast
Cancer*

*Technical Aspects
Of PET/CT*

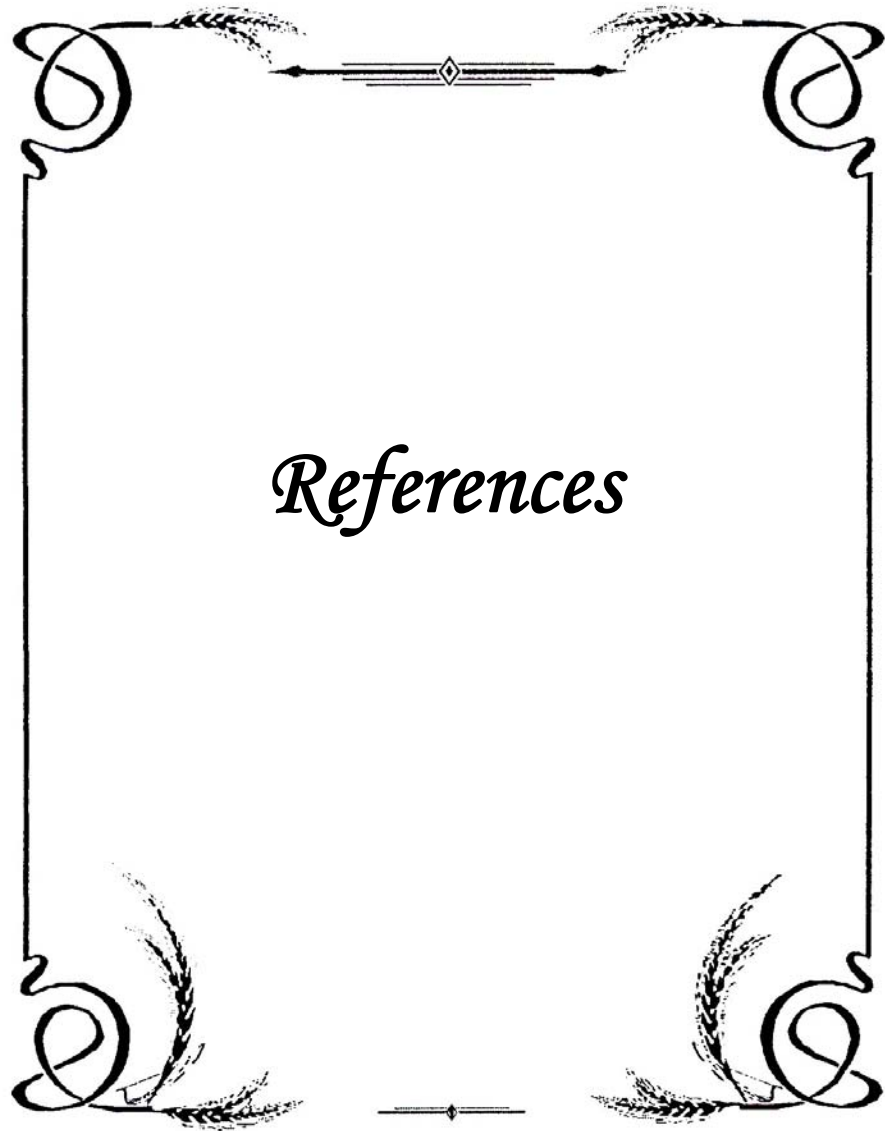
*Technical Aspects
Of MRI*

PET/CT
Manifestations
Of breast cancer

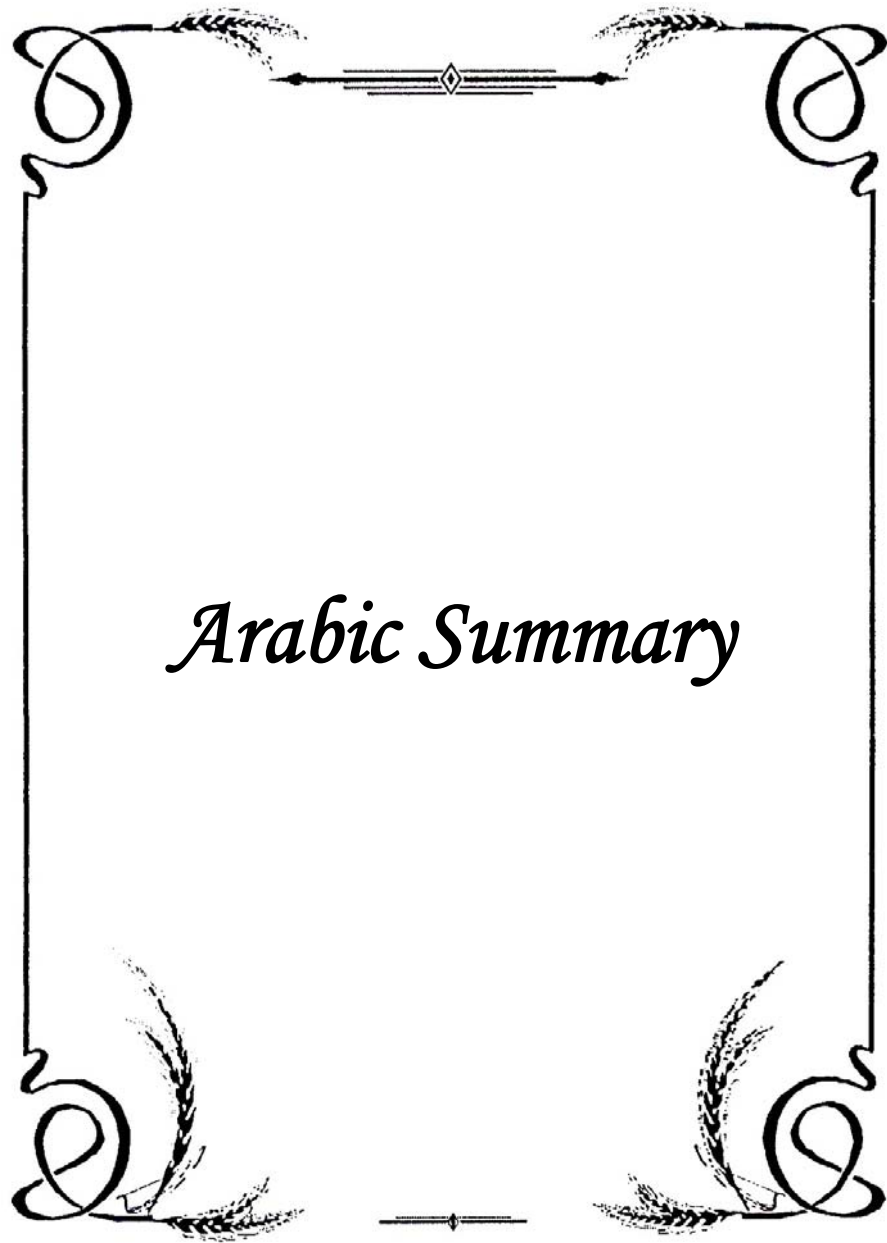


MRI
Manifestations
Of breast cancer

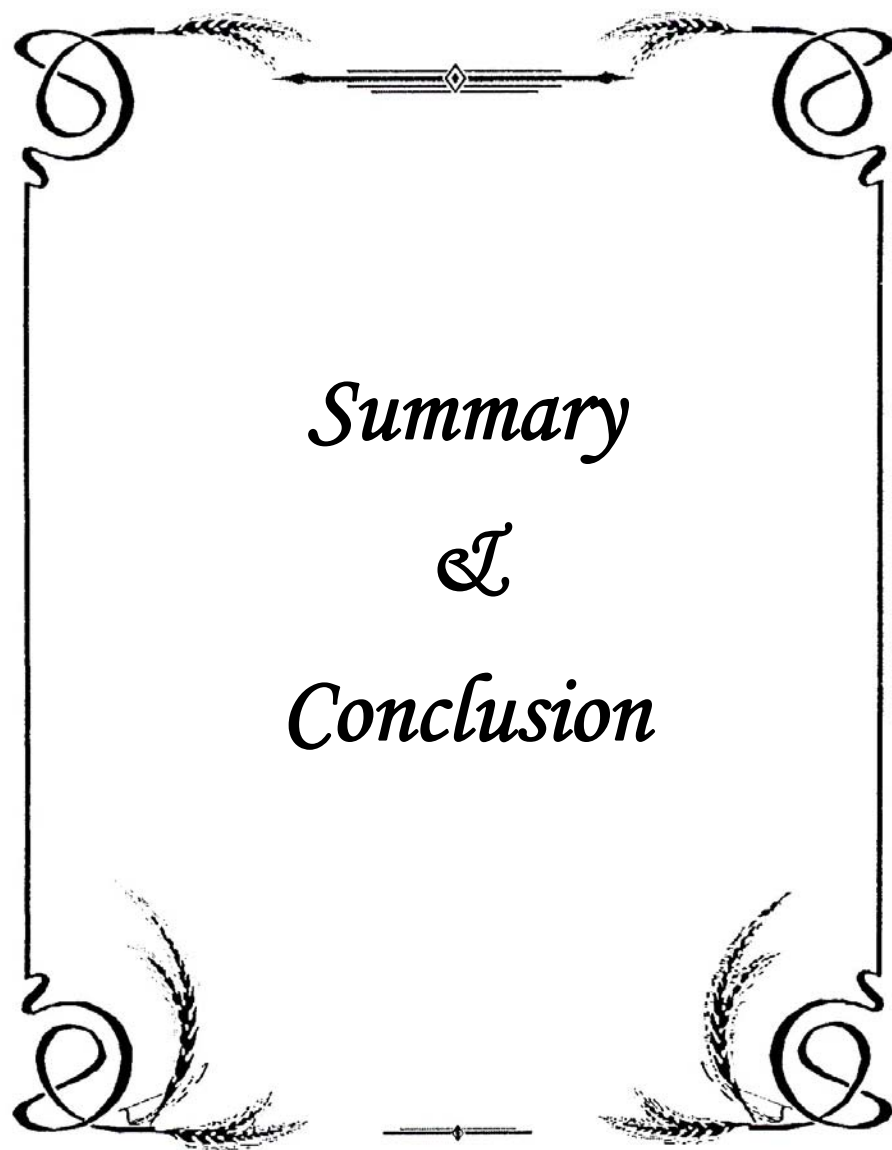
PET/CT
Versus MRI in
Management of
breast cancer



References



Arabic Summary



*Summary
&
Conclusion*