شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم

HANAA ALY

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جامعة عين شمس

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قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

HANAA ALY

Use of PET/CT in Diagnosis and Staging of Malignant Pleural Mesothelioma

Thesis

Submitted for Partial Fulfillment of Master Degree
In ***Rradiodiagnosis***

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Kerolos Magdy Wilson Sharobeem

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List of Abbreviations

Abb.	Full term

18 FFDG:.....18 fluoro-2-deoxy glucose

ADC: .....Apparent diffusion coefficient

BAP1 .....1-associated protein 1

BTS: .....British thoracic society

CE.CT: .....Contrast enhanced computed tomography

CTA-4: .....Cytotoxic T- lymphocyte antigen 4

CT-AC: .....Computed tomography attenuation correction

DNA: .....Deoxy ribo nucleic acid

DWI: .....Diffusion weight image

EPP: .....Extra pleural pneumonectomy

ER: .....Endoplasmic reticulum

G-CSF: .....Granulocyte-colony stimulating factor

GLUT: .....Glucose transporter

IASLC:.....International association for the study lung of lung cancer

KEV: .....Kilo electron volt

MBQ: .....Mega Becquerel (unit of radio activity)

MPM:.....Malignant pleural mesothelioma

MRI: .....Magnetic resonance imaging

MTAP: .....Methyl thioadenisine phosphorylase

NF-KB: .....Nuclear factor kappa light chain enhancer of activated B cells

OSEM: .....Ordered subsets-expectations maximization

List of Abbreviations (Cont...)

Abb.	Full term
P/D:	*Pleurectomy / decortiation*
P16CDKN2A:	*Protein 16 cyclin-dependant kinase inhibitor*
PD-1:	*Programmed cell death protein*
PD-L1:	*Programmed cell death ligand*
PET/CT:	*Positron emission tomography / computed tomography*
RT:	*Radiation therapy*
SFTA:	*Solitary fibros tumor of pleural*
SUV:	*Standardized uptake value*
SV40:	*Simian virus 40*
TNF:	*Tumor necrotic factor*
TNM:	*Tumor-node-metastasis*
UK:	*United kingdom*
USA:	*United states of America*
VATS:	*Video-ussisted thoracoscopic surhery*

INTRODUCTION

Malignant pleural mesothelioma (MPM) is the most common primary malignancy of the pleura. MPM arises from mesothelial cells that cover the lung and chest wall and is strongly associated with asbestos exposure, with latency periods ranging from 20 to 50 years ***(Kitajima et al., 2016).***

The most common pleural malignancy is pleural metastases, which can be difficult to differentiate from MPM. The differential diagnosis for MPM includes pleural metastases, solitary fibrous tumor of the pleura, epithelioid hemangioendothelioma, and metastatic dissemination of thymoma.

The association with asbestos exposure explains the predominance of MPM in men with men to women ratio of 4:1 with a median age between 50 and 70 years old. The median survival for a patient with MPM is between 4 to 18 months with predictors of poor prognosis including male gender, poor performance status and nonepithelioid histology ***(Odisio et al., 2017).***

The majority of patients with MPM are symptomatic at diagnosis usually presenting with chest pain and shortness of breath. Additional clinical symptoms may include cough, malaise and weight loss.