



To my parents (Nazar and Aziza)

To my

S

To D

To

To a

Acknowledgement

First of all I would like to thank ALLAH the creator of world for giving me the health, strength and mind.

I would like to thank my family for their great support to finish this project and they have been always there for me with encouragement, love, fostering, empower me and paving my way

I thank Dr. Mohammed Ahmed Ali for his sincere supervision, advice, and guidance from the very early stage of this research as well as giving me extraordinary experiences throughout the work. Above all and the most needed, he provided me unflinching encouragement and support in various ways.

I thank Dr. Mohamed Elfadil for sharing his valuable time and for giving me helpful information to finish this project.

Thanks

To my friends who helped me to finish this project

Abstract

This study focused on the bone metastasis from ovarian cancer, therefore the main objective of this study was to evaluate the metastatic behavior of ovarian carcinoma using bone scan. This study was conducted at Radiation and Isotopes Center in Khartoum at the nuclear medicine department, in the period from March 2010 to Jun 2011. The data were collected from 50 patients with ovarian cancer. ^{99m}Tc-MDP was administered to the patients intravenously (20 mCi) and gamma camera 'Philips' was used. By using excel. The result showed the anatomical site of ovarian cancer metastasis in skeletal system, it reveals the predominant anatomical site being involved by ovarian cancer secondaries were the Pelvic bone, Thoracic vertebrae, ribs, skull, other organ (liver), which taking 18 %, 16 %, 12% ,12%, 12% respectively. While the spread to LV, CV, Diffused and coccyx are taking 10%, 10%, 8% and 2%. And the incidence of ovarian cancer was linearly associated with the age.

The common encountered stage of ovarian cancer was stage IV representing 88% relative to other stages.

الخلاصة

هذه الدراسة اهتمت بانتشار سرطان المبيض الى العظام وعليه الهدف الرئيسي من هذه الدراسة هو تقييم انتشار سرطان المبيض باستخدام المسح الذري للعظام باستخدام النظائر المشعة بقسم الطب النووي في الفترة من مارس 2010 الي يونيو 2011

تم جمع البيانات من 50 مريض يعانون من سرطان المبيض تم حقنهم بالتكنيشيوم المشع مع المادة الصيدلانية ال ام دي بي عن طريق الوريد واخذت البيانات بجهاز الجاما كاميرا اظهرت نتائج الدراسة ان اكثر الاماكن انتشارا من سرطان المبيض في الهيكل العظمي هي عظم الحوض, الفقرات الصدرية, الاضلاع, الجمجمة , واماكن اخرى (الكبد) بنسبة 18% 16% 12% الصدرية, الاضلاع, الجمجمة , واماكن اخرى (الكبد) بنسبة 18% 16% 12% بينما الانتشار للفقرات البطنية , فقرات العنق, الانتشار في اكثر من مكان وفقرات الذنب بنسبة 10% 10% 8% و 2% . كما اوضحت ان

حدوث سرطان المبيض يرتبط خطيا تزايديا مع العمر . و أكثر مراحل المرض شيوعا هي المرحلة الرابعة و تمثل 88% مقارنة بالمراحل الأخرى .

List of content

Subject	Page N0
Dedication	4
Acknowledgement	4
Abstract	4
الخلاصة	4
Table of Content	4
List of Figures	4
List of Abbreviations	4
Chapter One	1
1.1Introduction: Anatomy, Physiology, Pathology and ovarian cancer, bone	1

metastasis.

1.5 Problem of the study	20
1.6 Objectives of the study	20
1.7 Thesis outline	21

Chapter Two

2.1 Literature Review	22
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Chapter Three

Methodology of the study

3.1 Introduction	28
3.2 Materials and tools	29
3.3 Method	30

Chapter Four

Results and Discussion	22
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Chapter Five

5.1 Conclusion	39
5.2 Recommendation	41
5.3 References	42

List of Figures

Figure No	Figure caption	Page No
4.1	Shows the anatomical site of ovarian cancer metastasis in skeletal system	35
4.2	Shows the common histological pattern of ovarian cancer in biopsy findings	36
4.3	Shows the distribution of ovarian cancer histological type in Sudanese states.	37
4.4	S scatter plot with a trend line demonstrate the relationship between Patient's age and ovarian cancer incidence	38

List of abbreviations

Abbreviation

Bq	Becquerel
C V	Cervical Vertebrae
CETC	Contrast Enhanced Computed Tomography
Ci	Curie
CT	Computer Tomography
ECG	Electrocardiogram
GCT	Granulose Cell Tumor
HNPCC	Hereditary Non Polyposis Colorectal Cancer
L V	Lumbar Vertebrae
MDP	Methaline Di Phosphate
MKK4	Mitogen-activated protein kinase kinase 4
MRI	Magnetic Resonance Image
MUGA	Multi Gated Test
PET	Positron Emission Tomography
RICK	Radio Isotopes Center of Khartoum
SPECT	Single Photon Computed Tomography
SPSS	Statistical Package for Social Science
T V	Thoracic Vertebrae

TAH-BSO	Total abdominal hysterectomy and bilateral salpingo-oophorectomy
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