الآيـة

بسم الله الرحمن الرحيم

قال تعالى:

(اللهُ لاَ لِلهَ هُوَ الْحَيُّ الْقَيُّومُ لاَتَا مُخْنَهُ سِنَةٌ وَلاَ نَوْمُلاَّهُ مَا فِي السَّمَاوَاتِ وَمَا فِي الْأَرْض مَن ذَا الَّذِي يَشْفَعُ عِنْدَهُ إِللاَّ إِنْذِهِ يَعْلَمُ مَا بَيْنَ أَيْدِيهِمْ وَمَا خَلْقَهُمْ وَلاَ يُحِيطُ وَنَ بِشَيْءٍ مِّنْ عِلْمِهِ إِلاَّ بِمَا شَاء وَسِعَ كُرْسِيُّهُ السَّمَاوَاتِ خَلْقَهُمْ وَلاَ يُحِيطُ وَنَ بِشَيْءٍ مِّنْ عِلْمِهِ إِلاَّ بِمَا شَاء وَسِعَ كُرْسِيُّهُ السَّمَاوَاتِ وَالأَرْضَ وَلاَ يَوُودُهُ حِقْظُ هُمَا وَهُوَ الْعَلِيُّ الْعَظِيمُ)

صدق الله العظيم

سوره البقرة الآية (255)

Dedication

Overall I dedicate this work for my parent ,then my Family ,my Husband ,my friend and for everyone who teach me something through my educational Journey.

Special dedication to my college professors ,and my collage whom teach me and always they been supportive .

Acknowledgement

I would like to start with thanking ALLAH for granting me the ability to complete this work. I would like to express my deepest thanks to Dr. Babiker Abdallwahab and also thanks Ultrasound department of Omderman Maternity Hospital by giving me chance to collect the research data.

Abstract

This is a descriptive cross sectional study which was done in Omderman Maternity Hospital and Omdurman friendship Hospital, carried out from August to December 2016.

Study amid to detect Adnexal causes of pelvic pain in non pregnant women using B-mode ultrasound, there were 50 female patients scanned trans abdominal and trans vaginal use TOSHIBA ModelSSA-370A. All these patients had pelvic pain, any female had age under fourteen and had normal pregnancy was excluded from this study. This study showed mean age between(26-35)years, and married more affected than non married, and also found PID most common causes of pelvic pain 21out cases(42%), followed by adnexal masses 18 of cases (36%), 7 of patient (14%) had adnexal cyst, 4 of patient (8%) had ectopic pregnancy. This research approved it is hypothesis that ultrasound was more accurate tool for detection of female pelvic pain.

We recommended further studies should be carried out in this field on many aspects such as increasing the number of patients, to show the relation between pelvic pain and infertility, comparing between the role of U/S scanning and other diagnostic tools, using a trans vaginal ultrasonographic approach and color Doppler ultrasonography.

المستخلص

هذه الدراسه وصفيه عملت في مستشفي الولاده امدرمان ومستشفي الصداقه الصيني بامدرمان، اجريت هذه الدراسه مابين شهراغسطس وديسمبر 2016. يهدف هذا البحث الي الكشف عن اسباب الام الحوض عند النساء غير الحوامل بواسطه الموجات الصوتيه نمط الكشف ب،حيث اخذنا 50حاله من النساء وتم الكشف عليهن مستخدمين مسبار الكشف عن طريق البطن ومسبار الكشف عن طريق المهبل باستخدام جهاز توشيبا موديل اس اس اي 370ي. كل هؤلاء النساء يعانين من الام الحوض، النساء اقل من 14سنه والحوامل حمل طبيعي قد تم استبعادهن من هذا البحث وجدت الدراسه متوسط الاعمار اصابه بالام الحوض مابين 26-35سنه والنساء المتزوجات اكثر اصابه من غير المتزوجات،كما وجدت الدراسه ان امراض الحوض الالتهابيه اكثر سببا لالام الحوضحيث21من الحالات بنسبه (42%) تليها الاورام 18 من الحالات بنسبه (36%) ثم تكيسات الحوضحيث11من الحالات بنسبه (41%) اقل حدوثا الحمل خارج الرحم 4من الحالات بنسبه (88%) . اثبت هذا البحث من خلال نظرياته ان الموجات فوق الصوتيه اكثر اساليب الفحص دقه في الكشف عن اسباب الام الحوض عند النساء .نوصي بعمل دراسات اكثر في هذا المجال كذياده عدد المرضي لمعرفه العلاقه بين الام الحوض والعقم والمقارنه بين دور الموجات فوق الصوتيه واساليب الفحص الاخري باستخدام المنظار المهبلي والدوبلر.

List of Contents

Content	Page
	NO
الاية	I
Dedication	II
Acknowledgement	III
Abstract English	IV
Abstract Arabic	V
List of contents	VI
List of tables	X
List of figures	XI
List of abbreviations	XII
Chapter One - Introduction	
1-1: Introduction	2
1-2 :Problem of the study	3
1-3: Objectives	4
1-3-1: General objectives	4
1-3-2: Specific objectives	4
Chapter Two - Literature review	
Anatomy	4
2-1: Anatomy of uterus	4
2-1-1: Relations of the uterus	4
2-1-2: Function of the uterus	5
2-1-3: Positions of the Uterus	5
2-1-4: Blood Supply of the uterus	5

2-1-5: Nerve Supply of the uterus	6
2-1-6: Supports of the Uterus	6
2-2:Anatomy of fallopian tube	
2-3:Anatomy of overies	
2-3-1: overian attachment and vascular supply	
2-4: physiology	11
2-4-1: physiology of the overy	11
2-4-2: physiology of fallopian tube	
2-5pathology	13
2-5-1: Pelvic inflammatory disease	13
2-5-2:Tubo overian complex and tubo overian abscess	14-15
2-5-3: Ectopic pregnancy	15-16
2-5-4:Endometriosis	17
2-5-5:overian torsion and overian cysts	18
2-5-6:Chronic pelvic pain	19
2-5-6-1: Gynicological malignancy	19-20
2-5-6-2: cystic teratoma	21
2-5-6-3: pelvic congestion syndrome	21
2-5-6-4:Residual ovary syndrome	21
2-6:Investigation	21
2-6-1: General investigation	21
2-6-2:Radiological test	22
2-6-2-1chest x-ray and HSG	22
2-6-2-2:Comuted TomographyCT	22
2-6-2-3:Magnatic Resonance MRI	22
2-6-2-4: Neuclear Medicine Image	23

2-6-2-5:Ultrasound	23	
2-7:Sonographic Technique	24	
2-7-1: Trans abdominal ultrasonography	24-26	
2-7-2: Transvaginal ultrasonography	26-28	
2-7-3:Sonographic appearance of ovary	28-29	
2-7-4: Sonographic appearance of fallopian tubes	29	
2-8: Previous studies	30-31	
Chapter Three - Materials & Methods		
3-1: Study design	32	
3-2: Area of study	32	
3-3: Study duration	32	
3-4: Sample of the study	32	
3-5: Inclusion criteria	32	
3-6: Exclusion criteria	32	
3-7:ultrasound device	33	
3-8: : Scanning technique	33	
3-8-1: Transabdominal scan	33	
3-8-2 Trasnvaginal scan	33	
3-9:Data collection	34	
3-10: Data analysis	34	
3-11:Ethical approval	34	
Chapter Four - Result and data analysis	35-48	
Chapter Five – Discussion, conclusion and recommendations		
5-1: Discussion	49-50	
5-2: Conclusion	51-52	
5-3: Recommendations	53	

References	52-55
Appendices	-

List of tables

Table	Page
	NO
4-1. Frequency distribution of age group	
4-2. Frequency distribution of marital state	
4-3. Frequency distribution of sigin and symptoms	
4-4-a Frequency distribution of ultrasound finding	
4-4-b Frequency distribution of ultrasound finding according to	43
finding for each patient	
4-5 Frequency distribution of final diagnosis	
4-6-a cross tabulation sign and symptoms and final diagnosed of	46
patient	
4-6-b chi -square test between sign and symptom and final	48
diagnosis	
4-7-a:cross tab age group and final diagnosed	
4-7-b: chi –square test age group and final diagnosed	
4-8-a:cross tab ultrasound finding and final diagnosed	
4-8-b: chi -square test between ultrasound finding and final	52
diagnosed.	
4-9correlation between age and final diagnosed	52

List of figures

Figure	Page
	NO
2.1 Shows lateral view of internal female reproductive organs	
2-2 shows anterior view of internal female reproductive organs	
2-3 U/S image shows PID	
2-4 U/S image shows complex solid and cystic mass with internal	17
vascularity in tubo overian abscess	
2-5 U/S image shows extra uterine gestational sac with fetal part inside	18
the sac.	
2-6 U/S images show peripheral vascularity around acystic mass with	19
homogeneous low level internal echo (endomettioma).	
2-7 U/S images show an enlarge ovary with prominent peripheral	21
located follicles with lack of parenchymal blood	
2-8 U/S image shows multicystic and solid complex mass	
2-9 show normal sonographic appearance of the overy	30
4-1.shows distribution of age group of women with adnexal pelvic pain	39
4-2. Shows distribution of marital status of women with pelvic pain	40
4-3. Shows distribution of sign and symptoms	41
4-4-a. Show distribution of ultrasound finding in women with adnexal	
pain.	
4-4-b:. Show distribution of ultrasound finding by cases.	45
4-5. Show distribution of final diagnosis for women with adnexal pain	46

Abbreviations

Abbreviation	Meaning
UTI	Urinary Tract Infection
ESR	Erethrocyte sedimentation rate
HSG	Hysterosalpingo gram
PID	Pelvic Inflammatory Disease
SPSS	Statistical Package for the Social Sciences
CBC	Complete blood count
U/S	Ultrasound
CT	Computed tomography
MRI	Magnetic resonance image