SUDAN UNIVERSITY OF SCIENCE & TECHNOLOGY

College of Graduate Studies

CHARACTERIZATION OF THE KIDNEYS IN PATIENTS WITH BENIGN PROSTATE HYPERTROPHY USING ULTRASOUND

توصيف الكليتين لمرضى تضخم البروستات الحميد باستخدام الموجات فوق الصوتية

Thesis Submitted For Partial Fulfillment Of The Requirement For M.Sc. Degree in Diagnostic Medical Ultrasound Imaging

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Feb 2012

بسم اللة الرحمن الرحيم

-:قال تعالى

(وما أوتيتم من العلم إلا قليلا)

صدق اللة العظيم

الاية (85) الاسراء

Dedication

To my parents

To my brothers

To my sisters

To my friends

To everyone helped me

I

ACKNOWLEDGEMENT

I wish to thank all those who helped me, without them , I could not have completed this project . I would like to thank Dr . Alsafi Ahmed the supervisor who helped me in this research and also my great thanks to Dr. Mohamed Alfaiel who sincerely and honestly helped me through my work to complete this thesis. Also I thank my medical staff of

Health Insurance in Aldmazin State for their sincere help.

Abstract

The main objectives of this study to evaluate the complications of the BPH on the kidneys in the male so as to improve the prognosis of this complications in the future.

The study consists of 50 patients from the Blue Nile State – Damazin, during the period (Dec 2011-May 2012) examined in National Health Insurance clinic. The study was performed using mindray device via transabdominal probe (3.5 MHZ).

All patients were evaluated with ultrasound following the international guide line scanning and protocols.

The results shows that most pathology distributed among males with age range (52-85) years old with the mean age of (69.46±8.384) and prostate weight range (35-160) with mean prostate weight (78.46±27.604).Complication of the BPH in the kidneys with the different variables shows ,(18%) small kidneys size, (8%) enlarged kidneys size , (14%) mild hydronephrosis, (14%) moderate hydronephrosis, (12%) sever hydronephrosis , (10%) calculi , (44%) acute pyelonephritis , (22%) chronic pyelonephritis , (30%) urine retention , (15%) cysts.

ملخص البحث

الاهداف الاساسية من إجراء هذه الدراسة تقويم مضاعفات تضخم غدة البروستات في الكلي

. للوصول الي نتيجة لتحسين علاجها في المستقبل

تم اجراء هذه الدراسة في عدد 50 مريض في ولاية النيل الازرق بمدينة الدماذين في الفترة بين (يناير 2012-مايو 2012) في عيادة الصندوق القومي للتامين الصحي , استعمل فيها جهاز ماينديري 2000 وجهاز ماسح خطي ذو تردد 3.5 ميقاهيرتز.

. جميع المرضى الذين اخضعوا للفحص اجري لهم بطريقة البروتوكولات العالمية المتبعة

النتيجة التى توصل اليها الباحث تفيد بان اكثر الفئات انتشارا لهذة المضاعفات هي فئة المرضى الذين تتراوح اعمارهم بين (52-85 سنة) المتوسط (69.46±8.384) وتضحم البروستات بين (35-160 جرام) المتوسط (78.46±27.604) ,مضاعفات تضخم البروستات الحميد في الكلي لمختلف المتغيرات تفيد بان (18%) حجم الكلي صغير, (8%) حجم الكلي متضخم ,(14%) تضخم بسيط في حوض الكلي ,(14%) تضخم متوسط لحوض الكلي , (12%) تضخم حاد في حوض الكلي , (10%) حصاوي في الكلي , (44%) التهاب حاد , (22%) التهاب مزمن , (30%) احتباس البول , (30%) تكيسات في الكلي .

List of table

Table 4.1	Mean and stander deviation of the age and prostate weight	60
Table4.2	Frequency of the kidneys size and percentages	61
Table4.3	Frequency of the hydronephrosis and percentages	62
Table4.4	Frequency variables of the calculi and their percentages	63
Table4.5	Frequency variables of the pyelonephritis and their percentages	64
Table4.6	Frequency variables of the urine retention and their percentages	65
Table4.7	Frequency variables of the cysts and their percentages	66
Table4.8	The frequency variables of the age groups and their percentages	67
Table4.9	The frequency variables of the prostate weight and their percentages	68
Table4.10	Relation between the prostate weight and the kidneys size	69
Table4.11	Relation between the prostate weight and the age	70
Table4.12	The relation between the prostate weight and the hydronephrosis	71

Table4.13	The relation between the prostate weight and calculi	72
Table4.14	The relation between the prostate weight and the pyelonephritis	73
Table4.15	The relation between the prostate weight and the urine retention	74
Table4.16	The relation between the prostate weight and the cysts	75

List of figure

Figure2.1	Renal corpuscle	7
Figure2.2	Glomerulus AND renal tubule	8
Figure2.3	Position of The Kidney	9
Figure2.4	Adrenal gland	10
Figure2.5	Renal Cortex and Renal Medulla	11
Figure2.6	Renal Tubules	17
Figure2.7	Bladder Muscle and Internal Surface	25
Figure2.8	Muscles of the Ureteral Orifices	25
Figure2.9	Muscles of the Urethral Orifice	26
Figure2.10	The Male Urethra	28
Figure2.11	ARF	30
Figure2.12	CRF	30
Figure2.13	ARPKD	32
Figure2.14	ARPKD	33
Figure2.1	Simple cyst	34

5		
Figure2.16	Parapelvic cyst	35

Figure2.17	RCC	37
Figure2.18	TCC	37
Figure2.19	Renal lymphoma	38
Figure2.20	Wilm’s tumor	39
Figure2.21	Acute pyelonephritis	41
Figure2.22	Chronic pyelonephritis	42
Figure2.23	Position of the prostate	44
Figure2.24	Position of the prostate	44
Figure2.25	Glandular tissue of the prostate	44

Figure2.17	RCC	37
Figure2.18	TCC	37
Figure2.19	Renal lymphoma	38
Figure2.20	Wilm’s tumor	39
Figure2.21	Acute pyelonephritis	41
Figure2.22	Chronic pyelonephritis	42
Figure2.23	Position of the prostate	44
Figure2.24	Position of the prostate	44
Figure2.25	Glandular tissue of the prostate	44

List of Abbreviations

BPH	Benign prostatic hyperplasia
PSA	Prostate-specific antigen
PCT	Proximal convoluted tubule
DCT	Distal convoluted tubule
JGA	Juxtaglomular apparatus
IVC	Inferior vena cava
ADH	Anti diuretic hormone
MOG	Medullary osmotic gradient
GFR	Glomular filtration rate
CRF	Chronic renal failure
ARF	Acute renal failure
BUN	Body urea nitrogen
ADPKD	Adult polycystic kidney disease
IPKD	Infantile polycystic kidney disease
PIN	Prostatic intraepithelial neoplasia

List of contents

Content	Page number
Dedication.	I
Acknowledgement.	II
Abstract (English).	III
Abstract (Arabic).	IV
List of Tables.	V
List of Figures.	VI
List of Abbreviations.	VIII
List of Contents.	IX
Chapter one:	
1-1 Introduction.	1
1-2 Objectives of the study.	3
1-3 Hypothesis.	3
1-4 Methodology.	4
1-5 Data analysis.	4
1-6 Data storage.	5
1-7 Contents.	5
Chapter two:	

2-1 Anatomy and Physiology of kidneys.	6
2-2 Pathology of the kidneys.	29
2-3 Anatomy and physiology of the prostate.	43
2-4 Pathology of the prostate.	46
Chapter three :	
3-1 Materials.	53
3-2 Data analysis methods	56
Chapter four :	
4-1The results.	57
Chapter five :	
5-1 Discussion .	76
5-2 Conclusion .	78
5-3 Recommendations.	80
References.	
Appendices .	

Chapter One

Chapter Two

Chapter Three

Chapter Four

Chapter Five