

Dedication

To my parent
To my sisters
My brothers
My friends
To everyone whom
Gave me a bit of
Wise advice

ACKNOWLEDGEMENT

I wish to thank all those who helped me. Without them, I could not have completed this project.

This research could not have been written without

Dr. Mohammed Mohamed Omer who not only served as my supervisor but also encouraged and challenged me throughout my academic program.

I would like to thank all people who have helped me and contributed to this research.

To my colleague in Alamal diagnostic center doctors, radiologist, technologists and staff of reception.

To my office partners.

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List of Tables

Table No.	Title	Page No.
(4-1)	Distribution of patients ages in frequency and percentage	47
(4-2)	Distribution of patients gender.	48
(4-3)	Distribution of the presence of family history among the patients .	49
(4-4)	Distribution finding of affected side by U/S in Percentage	50
(4-5)	Distribution of finding of affected side by U/S in Percentage	51
(4-6)	Distribution of finding of affected side by U/S in Percentage	52
(4-7)	Accuracy of U/S finding versus CT in detection of affected side	52
(4-8)	Distribution of Site of the stone by U/S in Percentage site	53
(4-9)	Distribution of Site of the stone by CT in Percentage	54
(4-10)	Distribution Accuracy of CT finding versus U/S in detection of site of the stone	55
(4-11)	Distribution Accuracy of U/S finding versus CT in detection of site of the stone	55
(4-12)	Distribution Measurement of stone size by U/S in mm	55
(4-13)	Distribution Measurement of stone size by CT in mm	57

(4-14)	Distribution CT versus US in measurement of stone size in	58
	kidney	
(4-15)	Distribution Accuracy of CT versus US in measurement of	69
	stone size in ureter	

List of Figures

Figure No.	Title	Page No.
(2-1)	Anatomical structures of the Urinary Tract of Human	4
(2-2)	Anatomical structure of the kidney	5
(2-3)	Anatomical structure of the functional unit of the kidney	9
(2-4)	Stone type	13
(2-5)	KUB radiograph: bilateral kidney stones	14
(2-6)	Axial CT KUB, showing stone in the Rt proximal ureter	15
(2-7)	Medical US device	19
(2-8)	Spiral ct principle	24
(2-9)	General component of the CT scanner	26
(2-10)	x-ray tube	27
(2-11)	CT detectors	29
(3-1)	TOSHIBA Aquilion 64 slices that used in the	42
(3-2)	U/S GE medical system	44
(4-1)	patients ages in frequency and percentage	47

(4-2)	patient's gender in frequency and percentage	48
(4-3)	frequency and percentage of the presence of family history among the patients	59
(4-4)	finding of affected side by U/S in Percentage	50
(4-5)	affected side by CT in Percentage	51
(4-6)	Site of the stone by U/S in Percentage site	53
(4-7)	Site of the stone by CT in Percentage	54
(4-8)	Measurement of stone size by U/S in mm	56
(4-9)	Measurement of stone size by CT in mm	57
(4-10)	CT versus US in measurement of stone size in kidney	58
(4-11)	CT versus US in measurement of stone size in ureter	59

Abstract

This study assessed the effectiveness of computed tomography and ultrasound in the diagnosis of renal stone and compared between two images modalities when they are applied for the same cases.

It was conducted at radiology departments in Al-amal hospital _ Khartoum.

This study was expanded from August 2011 up to December 2011.

Random samples of 50 patients, 35males (70%)and 15 females (30%)their ages range from 15 to 72 years old with symptoms of renal stones were chosen, spiral CT and US were done to explain the suitable technique that demonstrate renal stones clearly.

The most affected age group from 21-40 years old represent 56 %, most patients were affected in the both sides, with no history of renal stones in their families, kednys were the most affected area, and Most patients suffer from kedney stones (36%) and ureters 6%).

Ultrasound images have a role in the diagnosis of renal stones but CT scan is better and more sensitive. These results are established by account the number of appearances that showing in CT images and compared them with those appeared in ultrasound images

It can be said that the two image modalities were performed together and used as essential techniques of renal stones, which help to obtain accurate diagnosis and demonstrate any changes that can affect urinary systems by stones.

ملخص البحث

فى هذه الدراسه تم قياس فعالية الأشعه الم قطعيه الحلزونية والموجات فوق الصوتية فى تشخيص حصاوى المساك البولية و تمت المقارنه عند اجرائهما معا" لنفس الحالات

أجريت هذه الدراسه به قسم الأشعه الم قطعيه بمستشفى الامل الوطنى _ الخرطوم في الفتره من اغسطس 2011الى ديسمبر 2011

أخذت عينه عشوائيه تتكون من 50 مريض (35 من الرجال و 15من النساء) تتراوح اعمارهم بين 15 الى 72 سنه يعانون من اعراض حصاوى المسالك البولية. خضع كل المرضى لاجراء الفحصين لتوضيح الطرد قه المناسبه حصاوى المسالك البولية بصوره د قي قه

اوضحت الدراسة ان اكثر الاعمار عرضة للمرض بين 21 الى 40 سنة وان اكثر المرضى مصابين بالجانبين وان تاريخهم الاسرى لا يوضح مدى الاصابة

و يلعب الموجات فوق الصوتية دور فى تشخيص حصاوى المساك البولية لكن الاشعة الم قطعية افضل و أكثر حساسيه وتم الحصول على هذه النتائج من خلال حساب عدد الظواهر التى قام الاشعة الم قطعية بايضاحها وتمت م قارنتها بتك التى ظهرت فى الموجات فوق الصوتية

ومن هنا يمكن ال قول انه يمكن تشخيص حصاوى المسالك البولية باجراء الفحصين مع بعضهما البعض بصوره اساسيه للحصول على التشخيص الد قيق لاظهار التغيرات المرضيه

List of Contents

Page
I.
II.
III.
IV.
VI.
VIII
IX
X

Chapter one	
Introduction	1
Problem of the study	3
Objectives	3
Overview of the study	3

Chapter two	
Anatomical review	4

Structure of the kidney	5
Renal Blood Vessels	6
Lymph drainage and Nerve supply	6
Ureter	6
Urinary bladder	7
Urethra	8
Physiology	9
Pathology of urinary calculus	12
Diagnosis of kidney stones	14
CT scanner	18
Previous Studies	37
Chapter Three	
Materials & Methods	42
Place & time of the study	42
Patient's population:	42
Instrumentation	42
CT machine	42
CT KUB technique	43
U/S machine	44
Abdomen U/S technique	45
Chapter Four	
Result and data analysis	48
Г	
Chapter Five	
Discussion	61
Conclusion	64
Recommendation	65
References	66
Appendices	69