

Dedication

To my wife

To my parents

To my brothers

To my friends

Acknowledgement

I want to thank Dr. Alssafi Ahmed Abdallah
.then also extend to Dr. Mohamed Al Fadil

My thanks to staff of ultrasound department
in Omdurman Military Hospital especially Dr.
.Hago and Dr. Sami

Finally I would like to thank everyone who
.has participated in complication of this study

Abstract

The main objective of this study is to evaluate the capability of ultrasound to identify the urinary bladder out let obstruction (Boo) in Umdurman Military Hospital during period from May 2011 to December .2011

The sample of this study consisted of patients with age range from 60-80 years

The result of this study showed that forty four patients 88% out of fifty patient had an enlarged prostatic gland, and two patients had calculi 4% and two patients 4% had bladder cancer, one patient 2% had .divertular, one patient 2%, had urethral obstruction

The study shows that bladder out let obstruction (Boo) in men is mostly caused by benign prostatic hyperplasia. Bladder out let obstruction induces significant alterations in the urinary bladder wall especially in advance cases and also impaired ability of the urinary .bladder to store and empty urine

According to these results there was a clear proportional relation .between the enlargement prostatic gland and the age of the patient

The residual urine depends on the type of the cause of the .obstruction

The researcher found that measuring the prostatic gland size through
.an empty urinary bladder was not reliable

الخلاصة

كان الغرض من هذه الدراسة هو تقييم مقدرة الفحص بالموجات فوق السمعية لمعرفة إعاقه مخرج المثانة البولية، أجريت هذه الدراسة في مستشفى القوات المسلحة بأمر درمان في الفترة ما بين شهر مايو 2011 وديسمبر 2011م.

نظمت طريقة جميع المعلومات بحيث تؤخذ بطريقة واحدة تعتمد أساساً على فحوصات الموجات فوق الصوتية.

تم فحص خمسون مريض بواسطة الموجات فوق الصوتية باستخدام جهاز ألوكا وجنرال إلكترك مع محول طاقة واحد محذب ذو تردد 3.5-5 ميغا هيرز.

وجد الباحث أن هناك أربعة وأربعين 88% من جملة الخمسين كان لديهم تضخم في غدة البروستاتة.

وجدت الدراسة أن إعاقه مجري المثانة البولية يحدث تغيرات في سماكة جدار المثانة وعلى الأخص في الحالات المتقدمة وكذلك له تأثير في تخزين وتفريق البول من المثانة البولية وهذا يعتمد على نوع المرض وجدت الدراسة أن هناك علاقة طردية واضحة بين حجم غدة البروستاتة وعمر المريض.

وجد الباحث أنه لا يمكن الاعتماد على نتائج قياس حجم غدة البروستاتة عبر مثانة بولية فارغة.

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List of Abbreviations

Bladder outlet obstruction	Boo
Centimeter	Cm
The second sacral vertebra	S2
The forth sacral vertebra	S4
In example	.i.e
Mlitetar	Mm
Compound tomography	CT
Benign prostatic hypertrophy	BPH
Ultrasound	U/S
Kilohertz	KH ₃
Cycles per second	Cycles/s
Megahertz	MH ₃
Transabdominal	TA.s
Residual urine volume	R.U.V
Traditional Cell Carcinoma	T.C.C
Standard deviations	↯
Tumor	T

Sudan University of Science and Technology
College of Graduate Studies & Scientific
Research

Study of Urinary Bladder Outlet Obstruction Using
Ultrasound

دراسة إعاقة مخرج المثانة البولية بالموجات فوق الصوتية

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