



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

(إنما يخشى الله من عباده العلماء إن الله

عزيز غفور )

صدق الله العظيم ،،،

فاطر 28

## **DEDICATION**

*To the soul of my father and my mother*

*To Zayed military hospital staff of ultrasound department*

*To my wife*

*To my family*

*To my friends whom enlightened me throughout my journey in this  
study help me to continue*

## **ACKNOWLEDGMENT**

First I thank God who has blessed and guided me to accomplish this thesis.

Hereby thank Allah the merciful for continuous successful used to offer every step in my life Most grateful appreciation are owed to my supervisor professor Dr Mohamed Mohamed Omer for his good guidance and help through this thesis.

My gratitude thanks extended to everyone who supported my and provided my any type of help through my study.

## **ABSTRACT**

The purpose of this study was to study the ultrasound of acute scrotal disorders. This study was carried out in Zayed military hospital, Abu Dhabi (UAE) United Arab Emirates between April 2014 and September 2014, 50 patients aged from 2 years to 84 years old with acute scrotal symptoms, who underwent scrotal ultrasonography, were retrospectively reviewed, the clinical presentation outcome, and ultrasound result were analyzed. The presentation symptoms were divided into three groups, including scrotal pain, painless scrotal, and swelling or mass. The main finding of study group was 13 (26%) had varicocele ,8 (16%) had hydrocele , 6 (12%) had infection ,5 (10%) had cyst ,5 (10%) had epididimitis and epididimitis orcitis,4 (8%) normal ,3 (6%) had microlithiasis ,3 (6%) had wall thickened of scrotal ,1 (2%) had ectopic tactical ,1 (2%) had reactive lymph node ,1 (2%) had inguinal hernia. The most common cause of scrotal pain was (varicocele,hydrocele,infection,epididmitis,epididimitisorcitis,microlit hasis, scrotal wall thickened, and others. Ultrasound plays an important role in diagnosis of acute scrotal disorders and in planning for proper management. Color Doppler sonography CDS is an important imaging modality for the clinical assessment of patients with acute scrotum , the information's it can afford are operator-dependent and have to be supported by the history and physical exam of the patient.

## ملخص البحث

الهدف من هذا البحث دراسة اضطرابات الخصيتين الحاد بالموجات فوق الصوتية .  
اجرى هذا البحث في مستشفى زايد العسكري – ابو ظبي – الامارات العربية المتحدة في الفترة ما بين شهر ابريل الي شهر  
سبتمبر 2014 م اجري هذا البحث علي 50 مريض تتراوح اعمارهم ما بين 2 الي 84 سنة . والذين يعانون من اعراض حادة  
في الصفن واجري لهم فحص بالموجات فوق الصوتية وجري استعراضها باثر رجعي . وقد تم تحليل نتائج العرض السريرية  
ونائج الموجات فوق الصوتية .

تم تقسيم الاعراض الي ثلاثة مجموعات وهي كيس الصفن المؤلم وكيس الصفن الغير مؤلم و المتورم او ذي الكتلة .  
نتائج الدراسة 13 (26%) يعانون من دوالي الخصيتين و 8 (16%) يعانون من مرض القيلة و 6 (12%) يعانون من التهابات  
الصفن و 5 (10%) يعانون من كيس في الخصية و 5 (10%) يعانون من التهابات حادة و 4 (8%) كانت نتائجهم سليمة و 3  
(6%) يعانون من تحصي مكروي 3 (6%) يعانون من سماكة في جدار الصفن و 1 (2%) الخصية خارج المكان الطبيعي و  
1 (2%) يعاني من العقدة اللمفاوية التفاعلية و 1 (2%) يعاني من الفتق الاربي .

وضحت الدراسة ان من اكثر الاسباب لآلام الصفن الحاد هي دوالي الخصيتين ثم مرض القيلة ثم العدوي الالتهابية و التكيس و  
التحصي المكروي و سماكة جدار الصفن ثم امراض الصفن الاخرى. الموجات فوق الصوتية تلعب دور هام في تشخيص  
الصفن الحاد كما تلعب الموجات فوق الصوتية دور اساسي في التخطيط والادارة السليمة للمرض. الموجات فوق الصوتية  
الملونة تلعب دور اساسي في تشخيص المرض كما ان هنالك دور هام لتدريب وتأهيل العاملين في مجال الموجات فوق الصوتية  
في التشخيص السليم للمرض .

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## List of Abbreviations

US	ultrasound
ED	emergency department
EPs	emergency physicians
MRI	Magnetic resonance imaging
CDS	Color Doppler sonography
CT	Computed tomography
CEUS	contrast-enhanced ultrasonography
cm	centimeter
g	gram
h	hours
MHz	Mega her ties
UAE	United Arab Emirates
sust	Sudan university of science and technology
mL	Milliliter
CDS	Color Doppler sonography