

# **Sudan University of Science and Technology – Khartoum Sudan**

With Collaboration  
of Afro Asian Institute of Medical Sciences (AAIMS) Lahore, Pakistan and  
Ishabella Health Institute (IHI) Riyadh, KSA.

## **Thesis**

# **Ultrasound of Gall Bladder Pathologies and Their Incidence in KSA**

**Master of Science in Diagnostic Ultrasound**

**(M.Sc. Ultrasound)**

**Session: 2005-2006)**

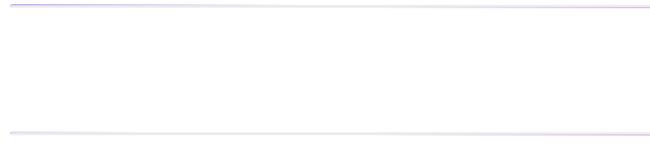
## **Student**

**Hamad Elneil Hassan Eltyb**

## **Supervisor:**

**Prof.Dr. Syed Amir Gilani**

**M.B; B.S (pb),PhD(Swiss)**



To my wife  
My daughters  
Especially Riham  
The most be love3d  
Hamad Elniel

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**This study would not have been possible without  
the cooperation of my keen and competent  
supervisor :**

**Prof. Dr. Syed Amir Gilani,**

**I'm very grateful to the magnificent guidance he offered. My  
thanks extend to Dr. Nasir Hameed,**

**Dr. Jawid Rafiq Malik**

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**Dr. Babiker Fadul**

**Dr. Abdalaziz Hassan**

**To their scientific and technical support**

**I would like to gratefully thank my parents for their active  
support**

**God blesses all of them**

**Hamad Elneil Hassan**

**2006**

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**I have studied the thesis**

**“ultrasound of GallBladder and their incidence in KSA”**

**By : Hamad Elniel Hassan Eltyb**

**And I found it satisfactory for submission**

**I wish him best of Luck.**

**Prof.Dr. Syed Amir Gilani**

**M.B; B.S (pb),PhD(Swiss)**

**4th Feb. 2006**

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This study is practical and descriptive study which continued for one year and was carried out in Khamis mushit civil hospital and Assir hospital. It discusses the protocol of ultrasound scanning in demonstrating of complication of Gall-bladder pathologies and their incidence.

Known cases of G.B pathologies (100 patient) were surveyed by ultrasound using Aloka scanner with 3-5 MHz probe and Toshiba 3.5-5MHz probe .

All patients were evaluated with ultrasonography following the international scanning guidelines and protocols.

The age of the patients is between (20—80) years 65

Patients (65%) were females and 35 patients (35%) were males . range of age group of accumulation for gallstone presence was (35 -50) years in females and above 50 years in male .

Incidence of gallstone in KSA 20% ration of incidence between male to female 1:2 .other pathologies of gallbladder were found to be acute cholecystities 30% , chronic cholecystities 20%, sludge 5%, carcinoma of the Gall-bladder 1% and Gall-bladder polyps 1%.

Ultrasonography as a single imaging modality is sufficient evaluation of patient with suspected gallbladder pathologies (gallstone) which can provide information about the presence of gallstone and more over about site and cause of biliary tract obstruction.

في هذا البحث تم دراسة 100 حالة مرضية تعاني من أعراض الحويصلة المرارية والقنوات الصفراوية

تمت الدراسة بمستشفى خميس مشيط المدني ومستشفى عسير المركزي في الفترة ما بين فبراير

. 2005م إلى فبراير 2006م

كل المرضى أضعوا للتشخيص بواسطة أجهزة الأمواج الصوتية فوق السمعية وفقا للبروتوكولات

العالمية المعمول بها . في هذه الدراسة كانت أعمار المرضى ما بين العشرين والثمانين ( 20 -

80 سنة ) 65% منهم إناث و 35% منهم ذكور . وقد وجد أن العمر التراكمي لحدوث حصوات

. المرارة ما بين 35 إلى 50 بالنسبة للإناث وأكبر من 50 عاما بالنسبة للذكور

معدل حدوث حصوات المرارة في السعودية عموما من خلال هذه الدراسة كانت حوالي 20% كما

أنه وجد أن التناسل في حدوث الحصوات بين الإناث والذكور 2: 1 ، وكانت الأمراض الأخرى للمرارة

. % عبارة عن إتهاب المرارة الحاد 30% والتهابات المرارة المزمنة 20

عموماً يعتبر تشخيص أمراض الحويصلة المرارية بواسطة أجهزة الأمواج الصوتية فوق السمعية هو الأكثر

. دقة وأقل تسبب في أعراض جانبية حيث أنه في متناول المريض وبأقل التكاليف

Subject	Page No.
Chapter ( 1 )	
Synopsis	
Chapter ( 2 )	
Antatony and physiology of GallBladder and Biliary system	
Pathology of GallBladder and Biliary system	
Ultrasound appearance and technique of normal G.B	
Ultrasound finding of common ( interested ) pathologies of G.B and Biliary system	
Chapter ( 3 )	
Orignial study ( data analyses)	
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Discussion	
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