

الآية

﴿ شَهِدَ اللَّهُ أَنَّهُ لَا إِلَهَ إِلَّا هُوَ وَالْمَلَائِكَةُ وَأُولُو الْعِلْمِ قَائِمًا بِالْقِسْطِ ۚ لَا إِلَهَ إِلَّا هُوَ ۚ ﴾

الْعَزِيزُ الْحَكِيمُ ﴿

﴿ ١٨ ﴾ سورة آل عمران الآية

Dedication

To heart the great my father and my mother

To the heart as pure my teachers : Omer Morcy Salih and

Mubarak Taha Mohamed

To my friends , and to all my family

Acknowledgement

I wish to thank my committee members who were more than generous with their expertise and precious time. A special thanks to my committee chairman for his countless hours of reflecting, reading, encouraging, and most of all patience throughout the entire process. Thank you Dr. Mohamed Omer, for agreeing to serve on my committee.

I would like to acknowledge and thank my college for allowing me to conduct my research and providing any assistance I requested. Special thanks go to the members of staff development and human resources department for their continued support.

Finally I would like to thank the group of this batch for encouraging and pushing to do our best to complete the master.

Abstract

Obstructive jaundice occurs when the biliary duct is obstructed which leads to bilirubin spreading to blood stream. This obstruction can be caused by masses (in liver or pancreas), stones in gall bladder, or duct narrowing.

This research studied these causes and tried to investigate its existence by using ultrasound. The study found that all these causes can be diagnosed using ultrasound. For this high accuracy and considering the fact that the technology is inexpensive, available and portable it is necessary to raise the awareness of the community to the importance of ultrasound as a first choice for investigating obstructive jaundice.

الملخص

مرض اليرقان الانسدادي ينتج عن انسداد مجرى العصارة الصفراوية بين الكبد والعفج مما يؤدي إلى إعادة توجيه المادة الصفراوية الزائدة إلى مجرى الدم. هذا الانسداد قد يكون بسبب ورم في الكبد أو في البنكرياس، حصى في المرارة، أو ضيق في المجرى.

في هذا البحث تمت دراسة هذه الأسباب في محاولة للتحقق من وجودها عن طريق الموجات فوق الصوتية. وكما سيظهر من خلال البحث فإن جميع هذه الأسباب يمكن تشخيصها بالموجات فوق الصوتية. وبالنظر إلى كفاءة هذه التقنية ونسبةً لأنها متاحة وغير مكلفة نسبياً بالإضافة لسهولة نقل الجهاز من مكان لآخر لذا من الضروري توعية الناس بأهمية الفحص بالموجات فوق الصوتية عند ظهور آثار المرض.

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List of Abbreviations

NAFLD	Non-alcoholic fatty liver disease
NASH	Nonalcoholic steatohepatitis
MS	Metabolic syndrome
DM	Diabetes mellitus
HT	Hypertension
BMI	Body mass index
AST	Aspartate aminotransferase
ALT	Alanine aminotransferase
γ -GT	Gamma-glutamyl-transferase
VLDL-C	Very-low-density lipoprotein cholesterol
LDL-C	Low-density lipoprotein cholesterol
HDL-C	High-density lipoprotein cholesterol
ALP	Alkaline phos-phatase
HAV	Hepatitis A virus
HBV	Hepatitis B virus
MRCP	Magnetic resonance cholengio pacreatography
CECT	High dose contrast enhanced computed tomography
PTC	Percutaneous trans hepatic cholengiology
ERCP	Endoscopic retrograde cholengio pacreatography
THI	Tissue harmonic imaging