### The Role of Endoscopic Ultrasound in The Study of Non-Calcular Biliary Obstruction

#### Thesis

Submitted For Partial Fulfillment of the Master Degree in Medicine

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## "قالوا سبحانك لا علم لنا إلا ما علمتنا إنك أنت العليم

الحكيم"

سورة البقرة آية ٣٢



# To my parents.

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## Introduction

#### INTRODUCTION

Endoscopic ultrasound is one of the tools showing structures with good resolution allowing accurate diagnosis which could help in obstructive jaundice (Nesjie et al., 1997).

In calcular obstructive jaundice, transcutaneous abdominal ultrasound is usually enough especially if combined with endoscopic retrograde cholangiopancreatography (ERCP), but non-calcular obstructive jaundice needs further investigations and imaging procedures of the biliary system and the surrounding structures. Recently, endoscopic ultrasound appeared to be one of these valuable procedures (Nation et al., 1994).

Endoscopic ultraonography (EUS) is a new technology that has evolved rapidly over the past few years, it combines features of endoscopy and ultrasonography to obtain structural information about the a gastrointestinal tract and the tissues immediately surrounding it, some of these structural information is not available by any other non-invasive procedures (Rosch et al., 1994).

# Aim of The Work

#### AIM OF THE WORK

The aim of the our study is to assess the role of endoscopic ultrasonography in the diagnosis of non-calcular obstructive jaundice versus other imaging procedures, as abdominal ultrasonography, computed tomography, endoscopic retrograde cholangiopancreatography and/or percutaneous transhepatic cholangiography.

## Review of Literature

#### ANATOMY OF THE BILLARY TRACT

The excretory apparatus of the liver consists of the intrahepatic ducts, the common hepatic ducts, the gall bladder which serves as a reservoir for bile, the cystic duct and the common bile duct. So it is very important to discuss the descriptive anatomy of the biliary tract beside the anatomy of the gall bladder (Warwick and Williams, 1973).

The liver is consisted of many lobules each one composed of radial columns of parenchymal cells, between them lie the bile capillaries whose walls are made of liver cells. They empty into interlobular bile ducts which become large bile ducts, till finally two main branches; right and left hepatic ducts. They unite together forming the common hepatic ducts which in turn joins the cystic duct from the gall bladder to form the common bile duct (Meschan, 1975).

#### The Hepatic Ducts:

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The intrahepatic segmental bile ducts unite to form lobar ducts, which in turn coalesce to form the right and left hepatic ducts that represents the beginning of the extrahepatic biliary system (Romanes, 1977).

The left hepatic duct is longer than the right and has a greater propensity for dilatation as a consequence of distal obstruction.