

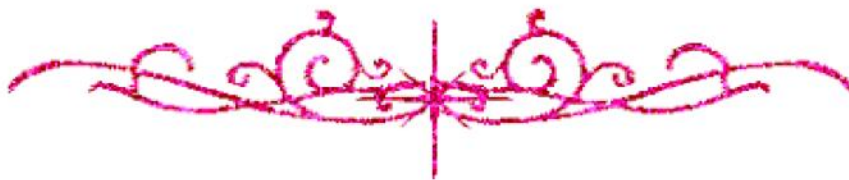
# بسم الله الرحمن الرحيم



**HOSSAM MAGHRABY**



# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



**HOSSAM MAGHRABY**

# جامعة عين شمس

## التوثيق الإلكتروني والميكروفيلم

### قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
على هذه الأقراص المدمجة قد أعدت دون أية تغيرات



## يجب أن

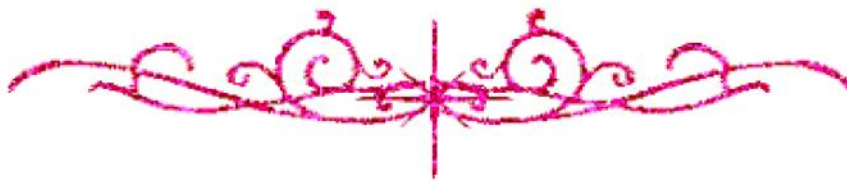
تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



**HOSSAM MAGHRABY**



# بعض الوثائق الأصلية تالفة



**HOSSAM MAGHRABY**



بالرسالة صفحات

لم ترد بالأصل



HOSSAM MAGHRABY

# **Sequelae of Endoscopic Injection Sclerotherapy**

*Thesis Submitted in partial Fulfillment for degree of M.Sc  
in Internal Medicine*

B16445

**BY**

**Dr. TAREK FATHY ABD EL-AZIM-EL-ASSAL**

**Supervisors**

**Prof.Dr. MAZEN NAGA**

*Professor of Internal Medicine*

*Faculty of Medicine*

*Cairo University*

**Dr. MOHAMED TALAAT EL-KHOLY**

*Lecturer of Internal Medicine*

*Faculty of Medicine*

*Cairo University*

**Faculty of Medicine**

**Cairo University**

**1995**

## ACKNOWLEDGEMENT

I would like to express my deepest gratitude, appreciation and sincere thanks to professor Dr.Mazen Naga, professor of Medicine and eminent endoscopist, Cairo University for his constant guidance, valuable advice and continuous support for this work to be fulfilled.

I am also very grateful to Dr.Mohamed Talaat Lecturer of Internal Medicine, Cairo University for his guidance and help.

I am also very grateful to Dr. Sahar Nasef for her great help, supervision and revision of the theses.

I am also very grateful for Dr. Zakaria Ismael Assist. Professor of Internal Medicine, Cairo University for his help.

Many thanks to Dr.Mohamed Amer Afify Lecturer of Tropical Medicine Al Azhar University for the hard work he had done in this work.

Tarek Fathi El Assal

# Contents

## \*\* Review of literatures

Introduction and aim of the work.	1
Portal venous system.	3
Portal hypertension.	7
Esophageal varices.	13
Diagnosis of oesophageal varices	24
Treatment of bleeding varices and portal hypertension.	36
Active measures to stop bleeding	39
Drugs used for portal hypertension	59
Sclerotherapy.	64
Sequelae of E.I.S.	88

## \*\* Material and Methods. 118

## \*\* Results. 122

## \*\* Discussion. 131

## \*\* Summary and conclusion. 144

## \*\* References. 147

## \*\* Arabic summary

**INTRODUCTION  
AND  
AIM OF THE WORK**

## Introduction and aim of the work

Variceal hemorrhage is a catastrophic and consequence of portal hypertension with acute mortality from 42-80% (Graham and Smith, 1981).

Rebleeding occurs in 60% during the first hospitalization and in 40% followed for one year (Clark et al, 1980; Sarles et al, 1985).

Endoscopic injection sclerosis (E.I.S) is a method that effectively controls acute variceal hemorrhage in cirrhotic patients. Repeated sessions of (E.I.S) prevent recurrent hemorrhage and may have prophylactic value in patients with oesophageal varices.

Unfortunately, E.I.S is known to cause large number of local complications in the oesophagus, which are generally self limited. Transient dysphagia, food impaction, oesophageal motility abnormalities, and strictures, the significant of which have not been clearly defined (Westaby et al., 1985; Grand et al., 1991).

The spectrum of changes includes mucosal ulceration, luminal narrowing, intraluminal defects, sinuses, fistulae, oesophageal

dissection and perforation in the early period (within 30 days). The spectrum includes strictures, irregular contour, mural defects, oesophageal dysmotility and luminal obstruction as late sequelae (after 30 days).

In this work a reasonable number of cases will be subjected to asses the early and late endoscopic changes after injection sclerotherapy of varices.

# **REVIEW OF LITERATURE**

# PORTAL VENOUS SYSTEM

The portal venous system includes all veins which carry blood from the abdominal part of the alimentary tract (except the lower part of the anal canal), spleen, pancreas, and gall bladder (Reynolds, 1987) (Sherlock, 1989).

The portal vein is formed by the union of the superior mesenteric vein and the splenic vein just posterior to the head of the pancreas at about the level of the second lumbar vertebra and in front of the inferior vena cava (Reynolds, 1987) (Sherlock, 1989).

The length of the portal vein ranges from 6 - 8 cm., with a diameter about 1.2 cm., and it has no valves. It reaches the right end of the porta hepatis where it divides into right and left branches. The right branch enters the right lobe of the liver and receives cystic vein before doing so. The left branch is longer but of smaller caliber than the right branch. It gives branches to left lobe of the liver (Andre, 1991).

The left branch of portal vein is joined by the ligamentum teres, a fibrous remnant of obliterated left umbilical vein which may recanalize in portal hypertension providing portosystemic

communication from the left portal vein to the superficial epigastric veins (Kane and Katz, 1982).

Tributaries of the portal vein are :

- |                         |                              |
|-------------------------|------------------------------|
| 1 - Splenic vein        | 2 - Superior mesenteric vein |
| 3 - Left gastric vein   | 4 - Right gastric vein       |
| 5 - Para umbilical vein | 6 - Cystic vein              |

The splenic vein begins by 5 to 6 tributaries issuing from the spleen, such tributaries are then joined by short gastric vessels to form the main splenic vein. It then descends to the right across the posterior abdominal wall where it receives numerous short tributaries from the pancreas. It usually joins the superior mesenteric vein at right angle to form the portal vein (Williams et al., 1989).

Other tributaries of the splenic vein are the left gastroepiploic and inferior mesenteric veins (Warwick and Williams, 1975).

The superior mesenteric vein is formed by tributaries from the small intestine, the caecum, the ascending and transverse part of the colon, the head of the pancreas and irregularly from the stomach via the right epiploic vein (Sherlock, 1989).

The inferior mesenteric vein drains blood from the rectum, the sigmoid and the descending part of the colon. Starting as the superior rectal vein in the rectum, it continues upwards and ends in the medial third of the splenic vein, but may sometimes enter the junction of the splenic and superior mesenteric vein (Sherlock, 1989).

The left gastric vein drains both surfaces of the stomach. At the oesophageal opening of the diaphragm, it receives some oesophageal veins. It ends in the portal vein (Reynolds, 1987).

The right gastric vein is running along the pyloric portion of the lesser curvature of the stomach. It receives the prepyloric vein before ending in the portal vein (Warwick and Williams, 1975).

The paraumbilical veins establish an anastomosis between the veins of the anterior abdominal wall and the portal vein (Warwick and Williams, 1975).

#### The hepatic veins :

The hepatic venous system begins with the terminal hepatic venules or central veins of the hepatic lobules. They empty into progressively larger vessels until 5 major hepatic veins form