



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ





شبكة المعلومات الجامعية



شبكة المعلومات الجامعية

التوثيق الالكتروني والميكرو فيلم

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون أية تغيرات



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %



شبكة المعلومات الجامعية



بعض الوثائق الأصلية تالفة



شبكة المعلومات الجامعية



بالرسالة صفحات
لم ترد بالأصل

**IMPACT OF ESOPHAGEAL VARICEAL
INJECTION SCLEROTHERAPY ON THE
CARDIOPULMONARY HAEMODYNAMICS**

Thesis

Submitted to the Faculty of Medicine
University of Alexandria
In Partial Fulfillment of the Requirements of
The Degree of

**MASTER OF
TROPICAL MEDICINE AND HYGIENE**

By

Rania Abdel-Hamid Magdy Mahmoud Abou-Youssef
MBBCh (Alexandria)

Faculty of Medicine
University of Alexandria

2002

B1x12

SUPERVISORS



Professor Dr.Siham Moustafa Abdel-Rehim

Professor of Tropical Medicine & Hygiene

Faculty of Medicine

University of Alexandria

Professor Dr.Hassan Ali El-Bahrawy



Professor of GIT Surgery & Endoscopy

Faculty of Medicine

University of Alexandria

Dr.Alaa El-Din Mohamed Abdou



Assistant Professor of Tropical Medicine & Hygiene

Faculty of Medicine

University of Alexandria

Co-worker

Professor Dr.Magdy Ali Abou-Rayan



Professor of Chest Diseases

Faculty of Medicine

University of Alexandria

B1-412

Dedicated to;

My Parents

For their endless support and love.

*Words of gratitude seem so small compared to what
they contribute to my life.*

ACKNOWLEDGEMENT

All praise to God, the most Gracious, most merciful, the fount of all wisdom.

I would like to express my deepest gratitude to **Prof. Dr. Siham Moustafa Abdel-Rehim**, Professor of Tropical Medicine and Hygiene, Faculty of Medicine, University of Alexandria. For her meticulous supervision for the whole aspects of the thesis, given regardless of her many professional and personal commitments during the period of my study, and for her continuous assistance and advice that helped me greatly in completion of this study, and the golden chance she offered me by being one of this great team work.

I would like to express my appreciation and thanks to **Professor Dr. Hassan Ali El-Bahrawy**, Professor of GIT surgery & endoscopy, for his continuous supervision, guidance, cooperation and limitless efforts to complete this work by selection of cases as well as doing endoscopy for the cases.

I am deeply indebted to **Professor Dr. Magdy Ali Abou-Rayan**, Professor of Chest Disease, for his constant, valuable and generous cooperation and continuous encouragement.

I owe **Dr. Alaa El-Din Mohamed Abdou**, Assistant Professor of Tropical Medicine and Hygiene, much more than gratitude and appreciation for his precious effort and time spent in careful guidance, close supervision, valuable advice, great support, fruitful criticism and continuous encouragement. He taught me the meaning of accuracy and the value of perfection. I consider my self extremely fortunate to have him as a supervisor.

It is a great pleasure to express my deepest thanks to **Dr. Ayman El-Shaieb**, Lecturer of Tropical Medicine and Hygiene and **Dr. Ehab EL-Khouly**, Assistant Lecturer of Tropical Medicine and Hygiene, for their continuous encouragement, dependable counsel and generous efforts & help to complete this work.

Last but not least, I would like to express my deepest gratitude to all my professors, all the members of my family, my fiancé, my friends and my colleagues for their valuable help and moral support throughout this work.

My deepest thanks to the members of chest department laboratory, Mr. Ali & Mrs. Nabawya for their great assistance during the whole work.

Limitless thanks and gratitude are due to patients, nursing staff and all members of Tropical Medicine Department.

LIST OF ABBREVIATIONS

ABG	=arterial blood gases
AcT	= acceleration time
AcTH	= acceleration time corrected to heart rate
ALT	= serum alanine amino-transferase
ARDS	= adult respiratory distress syndrome
Cm	= centimeter
Cumm	= cubic millimeter
DLco	= diffusing capacity of carbon monoxide
ECG	= Electro cardiogram
EDRF	= endothelial derived relaxing factor
EVL	= endoscopic variceal band ligation
EVS	= endoscopic variceal sclerotherapy
FEV₁	= forced expiratory volume at first second
FVC	= forced vital capacity
Hb	= hemoglobin
Hg	= mercury
H₂O	= water
HPS	= hepatopulmonary syndrome
HR	= heart rate
Hrs	= hours
HVPG	= hepatic vein pressure gradient
IPVD	= intrapulmonary vascular dilatations
I.V.C	= inferior vena cava
Kg	= kilogram
Min.	= Minute
ml	= milliliter
mm	= millimeter

mm³	= cubic millimeter
MOR	= sodium morrhuate
NIEC	= North Italian Endoscopic Club for The Study and Treatment of Esophageal Varices
NO	= nitrous oxide
PaCO₂	= arterial carbon dioxide tension
PaO₂	= arterial oxygen tension
PBF	= portal blood flow
PH	= portal hypertension
PHG	= portal hypertensive gastropathy
PV	= peak velocity
SaO₂	= arterial oxygen saturation
SB	= Sengstaken- Blakemore
STD	= sodium teadecyl sulfate
TIPS	= Transjuglar intrahepatic portocaval shunt
WBCs	= white blood cells

CONTENTS

Chapter		Page
I	Introduction	
	Portal hypertension.....	1
	Collateral circulation	7
	Esophageal varices	10
	Management of acute variceal bleeding.....	31
	Endoscopic variceal sclerotherapy	48
	Complications of endoscopic variceal sclerotherapy	58
II	Aim of the work.....	65
II	Subjects	66
IV	Methods.....	67
V	Results.....	75
VI	Discussion.....,	125
VII	Summary.....	164
VIII	Conclusion.....	151
IX	Recommendations	152
X	References	154
	Protocol	
	Arabic summary	



Introduction



Introduction

Portal Hypertension

Anatomy of portal venous system:

Portal system includes all veins, which carry blood from the abdominal part of the alimentary tract, the spleen, pancreas and gall bladder⁽¹⁾

The portal vein is approximately 6-8cm long, 1.2cm in diameter and valveless. It is formed by the union of superior mesenteric vein and the splenic vein just posterior to the head of pancreas at about the level of the second lumbar vertebrae,⁽²⁾ it extends slightly to the right of the midline for a distance of 5.5cm-8cm to the porta hepatis where it separates into right and left branches.⁽³⁾

Physiology of portal venous system

Portal blood flow is about 1000-1200 ml/min. the liver receives dual blood supply, 25% from hepatic artery, 75% from portal vein. These two inflows have distinct characteristics in terms of pressure, flow and composition. Arterial flow is nutritive while the mesenteric portal drainage represents the consequences of gastrointestinal function activity.⁽⁴⁾