



شبكة المعلومات الجامعية

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شبكة المعلومات الجامعية



شبكة المعلومات الجامعية

التوثيق الالكتروني والميكرو فيلم

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

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بعض الوثائق الأصلية تالفة



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بالرسالة صفحات
لم ترد بالأصل

Plasma Endothelin-1 Level in Patients with Schistosomal and Post Viral Liver Cirrhosis with Portal Hypertension : Its Relation to Portal Haemodynamics and Risk of Bleeding

*Submitted to Faculty of Medicine, University of Alexandria
in partial fulfillment of the requirements for the*

In

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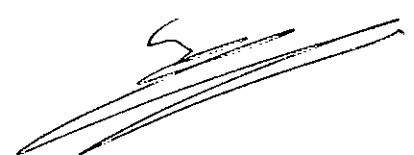


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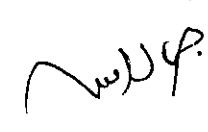


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ACKNOWLEDGEMENT

"Thanks to GOD for everything done in this work"

*I am deeply indebted to **Professor Dr. Mohamed Ahmed El-Beialy**, Professor of Internal Medicine, Medical Research Institute, University of Alexandria, for his vast knowledge helped in planning this work, his criticism of the practical work revealed many valuable points. Without his keen supervision, continuous discussion and sincere guidance, this work would never have been accomplished.*

*I am very grateful to **Dr. Mohamed Youssef El-Hassafy**, Assistant Professor of Internal Medicine, Faculty of Medicine, University of Alexandria, for his valuable help and continuous encouragement that gave the needed push and advance to this work.*

*No words can adequately express my sincere gratitude and great appreciation to **Dr. Samal Ahmed Amin**, Assistant Professor of Internal Medicine, Medical Research Institute, University of Alexandria; who gave generously his ideas and time in planning in this work, his assistance in the supervision of all parts of this work is appreciated. I am greatly indebted to him for his continuous encouragement.*

*I would like to express my deepest gratitude to **Dr. Mohamed Saad Ragab**, Assistant Professor of Chemical Pathology, Medical Research Institute, University of Alexandria for his help and guidance in the practical part of this study.*

*I am also greatly indebted and grateful to **Dr. Moustafa Fathy**, Assistant Professor of Internal Medicine, Medical Research Institute, for his help in the clinical practice of this work.*

*I am also very grateful to **Professor Dr. Gilan Fadaly**, Professor of Pathology, Medical Research Institute, University of Alexandria for her help in histopathological examination in this work.*





Dedicated To

The Soul of my Father

My Beloved Mother

My sincere husband

& to all my family



List of Abbreviations

ALT	:	Alanine Transaminase
AST	:	Aspartate Transaminase
AVH	:	Acute Viral Hepatitis
CI	:	Congestion index
CIPV	:	Congestion index of portal vein
ECE	:	Endothelin converting enzyme
EDCFs	:	Endothelium derived contractile factors
ELISA	:	Enzyme linked Immunosorbent Assay
Et-1	:	Endothelin-1
EtA	:	Endothelin A receptor
EtB	:	Endothelin B receptor
GEV	:	Gastrooesophageal varices
HBV	:	Hepatitis B virus
HCV	:	Hepatitis C virus
HCC	:	Hepatocellular carcinoma
HSCs	:	Hepatic stellate cells
HSS	:	Hepatosplenic schistosomiasis
IGV	:	Isolated gastric varices
IL10	:	Interleukin 10
IL2	:	Interleukin 2
IHA	:	Indirect haemagglutination test
MVPV	:	Mean velocity of portal vein
NIEC	:	North Italian Endoscopic club
NO	:	Nitric Oxide
NOS	:	Nitric Oxide Synthase
OV	:	Oesophageal varices
PBV	:	Portal blood flow velocity

PCR	:	Polymerase chain reaction
PHG	:	Portal hypertensive gastropathy
PPF	:	Periportal fibrosis
Proth. activity	:	Prothrombin activity
PV	:	Portal vein
Red WM	:	Red wale marking
ROS	:	Reactive oxygen species
S. Bil	:	Serum bilirubin
S. alb	:	Serum albumin
S. alk ph.	:	Serum alkaline phosphatase
SHF	:	Schistosomal hepatic fibrosis
SMV	:	Superior Mesenteric Vein
SV	:	Splenic vein
TGF β	:	Transforming growth factor β
TFA	:	Trifluoroacetic acid
Th1	:	T helper 1
Th2	:	T helper 2
US	:	Ultrasound

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INTRODUCTION

Chapter (I)

HEPATIC SCHISTOSOMIASIS

Schistosomiasis is a chronic debilitating disease caused by helminthic infection. Three closely related species of trematodes, belonging to the family schistosomatidae *Schistosoma mansoni*, *Schistosoma haematobium* and *Schistosoma japonicum* mainly affect humans. Other species which are essentially animal parasites but may occasionally infect man include: *S.bovis*, *S.matteei*, *S.intercalatum* and *S.mekongi*.⁽¹⁾ The two species present in Egypt are *S.haematobium* which is highly endemic in rural areas and *S.mansoni* which is almost limited to the Nile Delta and rarely found in south of Cairo.⁽²⁾

Incidence

Hepatic schistosomiasis is probably the world's most prevalent chronic liver disease.⁽³⁾ In Egypt, it cause 70% of liver cirrhosis. Half of these cases are pure schistosomal, while the other half is complicated mostly by nutritional defects or sequelae of viral hepatitis.⁽⁴⁾

Hashem,⁽⁵⁾ by study of autopsy material found that hepatic schistosomiasis occurs in 15% of cases infected with *Schistosoma haematobium*; in 72% of *Schistosoma mansoni* and in 36% of mixed infection. Elwi and Attai,⁽⁶⁾ reported an incidence of 10,37 and 32.0% respectively.

Pathogenesis and pathology

The pathogenesis of liver affection in schistosomiasis is produced by prolonged and repeated embolization of the liver by ova that are shifted back from the terminal radicals of the mesenteric and haemorrhoidal veins where they fail to emerge through their walls.⁽⁶⁾ Deposition of ova may occur either in the large portal radicals, producing the coarse type of SHF (Symmer's clay pipe stem) or in the small portal tracts producing the fine diffuse type.⁽⁷⁾ Eggs deposited which are the important initiating factor of hepatic schistosomiasis are surrounded by intense eosinophilic and histiocytic cellular reaction forming granulomata in and around the adjacent vessels with swelling of its endothelium and sometimes cellular reaction of their walls. The reaction may be so intense as to block the vessel. This reaction is gradually replaced by fibroblasts associated with new capillary formation. The liver parenchyma between the fibrotic areas is typically well preserved correlating with the maintenance of nearly normal hepatic function which is characteristic of hepatic schistosomiasis.^(8,9)

Diffusile toxin of dead or living worms, the presence of dead worms and dietary deficiency are other factors which may contribute to the pathogenesis.⁽¹⁰⁾

Hepatic schistosomiasis has the following special pathological pattern which differentiate it from other types of cirrhosis:⁽¹¹⁾

- 1- Diffuse cellular granulomatous eosinophilic infiltration ending in coarse or fine diffuse fibrosis of the portal tracts.