

**PREVALENCE OF PORTAL HYPERTENSIVE COLOPATHY AND ITS
RELEVANCE TO PREVIOUS HISTORY OF ENDOSCOPIC ESOPHAGEAL
VARICEAL LIGATION OR INJECTION**

Thesis

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By

Mohammed El sayed Mahmoud Owid

M.B, B.CH. (Cairo University)

Supervised by

Prof. Dr. EBTISSAM ZAKARIA

Professor of Internal Medicine

Cairo University

Prof. Dr. AMAL FATHY RADWAN

Professor of Internal Medicine

Cairo University

Prof. Dr. HUSSEIN OKASHA

Professor of Internal Medicine

Cairo University

Prof. Dr. HANI KHATTAB

Professor of Pathology

Cairo University

Faculty of Medicine

Cairo university

2012

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

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LIST OF ABBREVIATIONS:

AAR	AST/ALT ratio.
ALP	Alkaline phosphatase.
ALT	Alanine aminotransferase
ANA	Anti nuclear antibody
ANCA	Anti nuclear cytoplasmic antibody
Anti-LKM1	Anti liver kidney microsomal antibody
Anti-SMA,	Anti smooth muscle antibody
APC	Argon plasma coagulation
AST	Aspartate aminotransferase
BUN	Blood urea nitrogen.
CE	capsule endoscopy.
CSPH	Clinically significant portal hypertension
CT	Computerized tomography.
DIC	Disseminated intravascular coagulopathy.
DLco	Carbon Monoxide Diffusing Capacity
ECV	Ectopic varices
EGD	Esophagogastroduodenoscopy.
EGF	Epidermal growth factor
EST	Endoscopic sclerotherapy
ET	Endothelin.
EVL	Endoscopic variceal ligation

FHVP	Free hepatic venous pressure
GAVE	Gastric antral vascular ectasia
GGT	Gamma-glutamyl transpeptidase.
GOV	Gastroesophageal varices.
HBV	Hepatitis B virus
HCC	Hepatocellular carcinoma.
HCV	Hepatitis C virus
HPS	Hepato pulmonary syndrome
HRS	Hepatorenal syndrome
HVPG	hepatic venous pressure gradient.
IGF	insulin growth factor
IgG	Immunoglobulin G.
IGV	Isolated gastric varices.
IL	Interleukin.
INR	International normalization ratio.
LFTs	Liver function tests.
LGIB	Lower gastrointestinal bleeding
MMP	Matrix metalloproteinase.
NASH	Non alcoholic steatohepatitis
NIEC	North Italian endoscopic consortium.
NSAID	Non-steroidal anti-inflammatory drugs.
NSBB	Non selective b-adrenergic blockers
PDGF	Platelet-derived growth factor.

PHC	Portal hypertensive colopathy
PHE	Portal hypertensive enteropathy
PHG	Portal hypertensive gastropathy
PHT	Portal hypertension
PML	Polymorph nuclear leukocyte
POPH	Porto pulmonary hypertension
PT	Prothrombin time
PVCI	Portal vein congestion index
PVD	Portal vein diameter.
ROS	Reactive oxygen species.
SAAG	Serum-ascites albumin gradient.
SBP	Spontaneous bacterial peritonitis.
TGFB	Transforming growth factor beta
TIMP	Tissue inhibitors for metalloproteinase.
TIPS	Transjugularr intrahepatic portosystemic shunts
WHPV	Wedged hepatic venous pressure

Abstract

Background and study aims:

Portal hypertensive colopathy (PHC) is a gastrointestinal complication of portal hypertension. There is a large discrepancy between previous studies regarding prevalence of portal colopathy and its correlation with other factors. The aim of this study is to evaluate the prevalence and factors affecting colonic mucosal changes in patients with liver cirrhosis and portal hypertension.

Patients and methods:

Sixty six patients with liver cirrhosis and portal hypertension(PHT) underwent upper gastrointestinal endoscopy as well as a full length colonoscopy to detect portal colopathy. PHC was diagnosed endoscopically by the presence of diffuse hyperemic mucosa, vascular ectasia, and rectal varices. Biopsies were obtained from the rectosigmoid area as well as from any abnormal mucosal lesions apart from angiodysplastic areas.

Results: Diffuse hyperemia, angiodysplasia and rectal varices were found in 64.2%, 40.9% and 13.6% of patients respectively. While hemorrhoids were seen in 54.5%.No significant correlation occurred between severity of PHC and worsening of child classification. In the current study none of the following parameters (grades of oesophageal varices, presence of gastric varices and severe congestive gastropathy) had significant correlation with PHC. No statically significant correlation between the presence and severity of PHC and previous history of variceal injection sclerotherapy or band ligation. Colonoscopic features of PHC were significantly associated with the histopathological diagnosis revealing 94.4% sensitivity and 30.8% specificity

Conclusion; PHC is a frequent finding in cirrhotic patients with PHT. Colonoscopic features suggestive of PHC were in concordance with histopathological evidence, rectal varices are an important cause of lower GIT bleeding

Key Words; Portal hypertension, portal hypertensive colopathy, liver cirrhosis

**INTRODUCTION
AND
AIM OF THE WORK**

INTRODUCTION

The burden of chronic liver disease continues to increase fueled by epidemics of chronic hepatitis C. All etiologies of cirrhosis share a common final pathway with the development of portal hypertension and its repercussions on different organ systems (**Iwakiri et al, 2006**)

The pathogenesis of portal hypertension in cirrhosis arises from the combination of increased resistance to portal flow both mechanically and by endothelial dysfunction as well as elevated portal inflow (**Langer et al, 2006**)

Portal hypertension accounts for the most severe complications of liver cirrhosis, such as gastroesophageal varices formation and rupture, ascites, and hepatorenal syndrome (**Groszmann et al, 2005**)

Variceal bleeding is a severe complication of portal hypertension with a mortality rate between 30 and 60%. During the last two decades the treatment of these patients has been improved (**Theocharis et al, 2006**)

Endoscopic management in the form of sclerotherapy and variceal band ligation together with pharmacological therapy are currently used with similar efficacy in preventing variceal re-bleeding (**Romero et al, 2006**)

Alterations of colonic mucosa in Portal hypertensive patients include; edema, erythema, granularity, friability, and vascular lesions, findings that may be confused with colitis (**Bini, 2000**)

Portal hypertensive colopathy is the term used to describe vascular manifestations of portal hypertension in the colon. Manifestations include varices, and spider-like telangiectasias and colitis-like appearance. (**Misra V.et al;2003**)