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

Thesis

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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)**