

Original Article

PREVALENCE OF CONGESTIVE GASTRO AND DOUDENOPATHY IN PATIENTS WITH PORTAL HYPERTENSION

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Objective: The aim of this study was to determine the prevalence of congestive gastropathy/duodenopathy in portal hypertension.

Material & Methods: A cross sectional study of 100 patients with portal hypertension undergoing upper gastro-intestinal endoscopy in Medical Unit IV was carried out in which their history, clinical and endoscopic examination was done..

Results: Congestive gastropathy was seen in 88% of the patients, while congestive duodenopathy was seen in 19% of the patients.

Conclusion: The study data analysis leads to the conclusion that the congestive gastropathy can be included as one of the common complications of advanced liver cirrhosis.

Keywords: Congestive gastropathy, duodenopathy, portal hypertension.

Introduction

Patients of chronic liver disease undergo two stages: first reflects the alteration due to original disease; and second is due to its consequence i.e. portal hypertension. The pathophysiology of portal hypertension is complex. The important factors are an increase in intrahepatic resistance, increase in splanchnic blood volume and opening of portosystemic collaterals.¹ Portal hypertension affects several organ systems. The first to be affected is gastrointestinal tract.²

Congestive gastropathy and mucosal vasculopathy are the terms currently used to define gastric mucosal abnormalities occurring in portal hypertension. The endoscopic appearance of this condition has been categorized as fine pink speckling, superficial reddening and the most common mosaic or snake skin pattern.³

The histologic hallmark related to these endoscopic patterns is prominent vascular ectasia in the lamina propria with an almost complete lack of inflammatory cells. Submucosal edema thickened arterioles and angiomas are also seen.⁴

Material & Methods

The objective of our study was to determine the prevalence of congestive gastropathy & duodenopathy in patients with portal hypertension. This cross-sectional study was conducted in Medical Unit-IV of Services Hospital, Lahore. Duration of study was six months. A total of 100 patients were included in the study who had clinical and radiological evidence of portal hypertension. Informed consent was taken from all the patients. A

detailed history of each patient was taken; especially about hematemesis, malena and abdominal distention or any previous episode of hepatic encephalopathy or fundal varices as a marker of portal hypertension. A grading system was devised to categorize the mucosal changes as mild, moderate and severe, depending on upper G.I. endoscopy.

Results

In our study, 45% of the patients belonged to the age group of 40-50 years, while 26% were in the age group of 50-60 years and 16% above 60 years. Only 4% of the patients belonged to age group of 20-30 years. 56% of patients were male. 80% of the patients presented with history of upper gastro-intestinal bleeding (hematemesis, malena etc.) and specific complaints of epigastric pain, indigestion or heart burn. Splenomegaly was found in 65% of the patients. 92% of the patients had esophageal varices on endoscopic examination. The grading of the esophageal varices varied, 10% of them had grade-I varices, 30% had grade-II varices; grade-III and IV esophageal varices were seen in 39% and 13% of the patients respectively. Fundal varices were observed in 28% of the patients. Congestive gastropathy was seen in 88% of the patients. It varied between mild, moderate and severe gastropathy according to the pre-set criteria of grading.

Discussion

This study has suggested the co-existence of portal hypertension and gastropathy. This is comparable with a study reported by TT Me Cormack, J Sims and

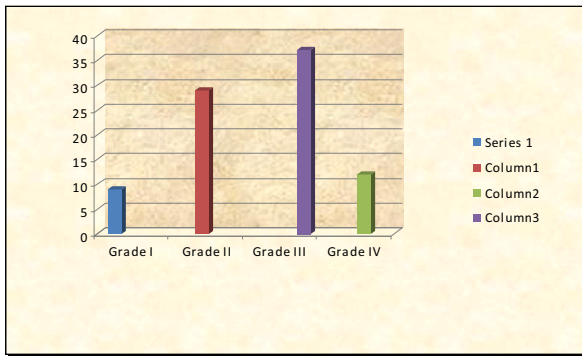


Fig-1: Grading of varices.

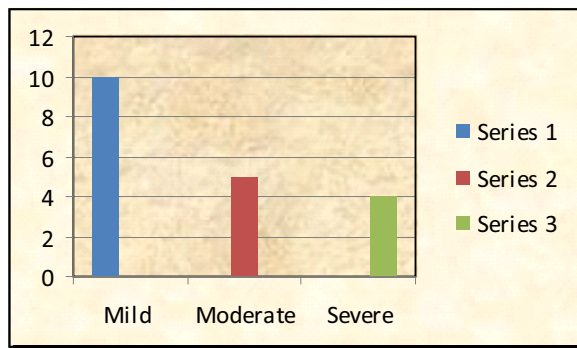


Fig-2: Congestive Gastropathy.

Congestive duodenopathy was seen in 19% of the patients.

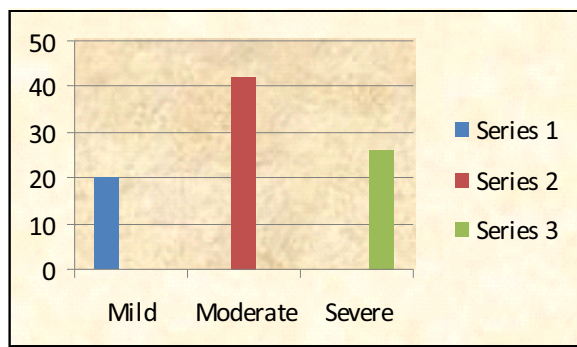


Fig-3: Congestive Duodenopathy.

H Kennedy. Gastropathy was observed in 51% of the patients.

Sciciliano M, also reported mosaic like pattern, red points and black-brown spots and erosions in the gastric body and cardia. The prevalence of gastropathy was seen in 30-70% of the patients.

Rondonthi E, tried to use congestive gastropathy as a diagnostic tool for portal hypertension.⁵

He concluded that large prospective studies are significance of small bowel mucosal change in patients who have cirrhosis. Negean UL reported the prevalence of portal gastropathy as 50%-98%. This variation of the prevalence was perhaps related to patient selection, inter and intra observer variation and absence of uniform criteria and classification.⁶

Menchen L, Ripolle estimated the prevalence of congestive duodenopathy in portal hypertension to be 8.4%.⁷

Conclusion

Congestive gastropathy is common complication of portal hypertension. Its co-existence with esophageal varices suggests the same action- pathology. It is very common in cirrhotic patients who present with upper gastro-intestinal bleed. On the other hand portal hypertensive duodenopathy is a rare condition related to liver cirrhosis. The clinical significance of these findings remains to be determined.

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