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UPPER GASTROINTESTINAL ENDOSCOPY FINDINGS OF PATIENT PRESENTING WITH CHRONIC LIVER DISEASE: A PROFILE FROM EASTERN INDIA

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ABSTRACT

Introduction: Upper gastrointestinal tract (UGIT) endoscopy is a safe and easily carried out procedure of high diagnostic value and also has therapeutic value in some cases. Patients with chronic liver disease are generally referred for UGIT endoscopy, which is the reference standard for diagnosis of features of portal hypertension (oesophageal and gastric varices).

Aim and Objective: To categorize the reasons for referral for UGIT endoscopy and to determine the associated risk factors regarding chronic liver disease.

Material and methods: A retrospective study was conducted on consecutive 50 patients with chronic liver disease who attended the endoscopy clinic at the School of Tropical Medicine, Kolkata from April 2015 to March 2016.

Results: The most commonly identified endoscopic findings were esophageal varix(44%), gastritis (36%), portal hypertensive gastropathy (36%), hiatus hernia(12%). Gastric varix was identified in 4 % of patients. Endoscopy findings were normal in 12% patients. Among all patients 16 patients had mixed findings and few other findings (like duodenitis, esophagitis, esophageal candidiasis, hemorrhagic spots etc). Esophageal varix, gastritis, and portal hypertensive gastropathy were the commonest findings of chronic liver disease.

Conclusion: This study showed that many more lesions can be seen in patients with chronic liver disease apart from varices.

INTRODUCTION

Liver cirrhosis (also known as chronic liver disease) is a condition that is characterized by hepatic fibrosis, nodular regeneration, and distortion of hepatic architecture[1]. The major complications seen in chronic liver disease are portal hypertension, ascites, coagulopathy, hepatic encephalopathy, and hepatocellular carcinoma[2]. The use of fibre-optic endoscopy has greatly facilitated the management of some patients with chronic liver disease. Upper gastrointestinal endoscopy plays a pivotal role in the diagnosis and management of oesophageal and gastric varices[3]. A common risk factor of upper GI bleeding is cirrhosis of liver, which can lead to variceal haemorrhage. 30–40% of cirrhotic patients who bleed may have non-variceal upper GI bleeding and it is frequently caused by peptic ulcers, portal gastropathy, Mallory-Weiss tear, and gastroduodenal erosions[4]. The common risk factor of upper GI bleeding is cirrhosis of liver due to hepatitis B & C[5]. Cirrhosis affects 3.6 out of every 1000 adults in North America and causes 32,000 deaths annually. A major cause of cirrhosis-related morbidity and mortality is the development of variceal haemorrhage[6]. Development and growth of gastro-oesophageal varices each occur at a rate of 7% per year. The 1-year rate of a first variceal haemorrhage is approximately 12% (5% for small varices and 15% for large varices)[6]. Portal hypertension affects the gastrointestinal tract and it may lead to portal hypertensive gastropathy (PHG) which is the cause of chronic anaemia in some cirrhotic patients. So if we detect the varices and PHG early and treat accordingly, we can prevent these complications like anaemia and bleeding[7].

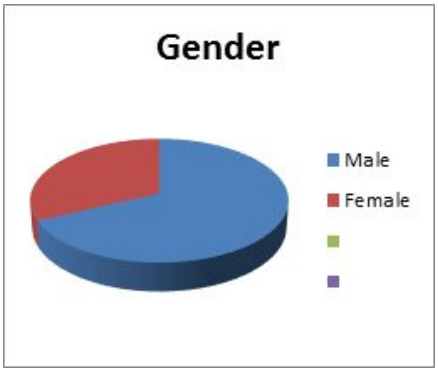
The objective of this study was to determine the reasons for referral for UGIT endoscopy and to determine the associated risk factors regarding chronic liver disease.

MATERIALS AND METHODS

This is a retrospective study was conducted on consecutive 50 patients with chronic liver disease who attended the endoscopy clinic at the School of Tropical Medicine, Kolkata from April 2015 to March 2016. The diagnosis of liver cirrhosis was made by clinical and radiological findings. Upper GI endoscopy was performed on all the patients after spraying oropharynx with 2% xylocaine and the patients were placed in the left lateral position, and a mouth gag was then placed between the incisor teeth. The gastroscope was then introduced under direct vision into the oropharynx, the esophagus, stomach, and duodenum, which were performed by experienced endoscopist. A pre-designed proforma was used to collect information from the hospital records. By using the proforma data were collected from hospital records of total of 50 patients with chronic liver disease. Standard statistical methods was used for data analysis.

RESULTS

In the present study age of the patient range from 17- 60 years with mean 48.71. Most of the patients were in 3rd and 4th decade of life. Out of 50 patients, 68% were males and 32% were females with male: female (2.12:1).



Our most of the patients (60%) presented the endoscopy clinic from out-patient department to detect any complication during or before treatment. Other patients were from in-patient

department. For this reason a large number (18) of patients were asymptomatic (had CLD due to chronic hepatitis B and C). Other common symptoms presented by the patients was abdominal swelling in 22 (44%), leg swelling in 30 (60%) patients. Clinical examination revealed that 28 (56%) patients had ascites, 20 (40%) had hepatomegaly, and 17 (34%) had prominent anterior abdominal wall veins. Among the admitted patients, 6 patients presented with hematemesis and malena and others presented with other complications of CLD, in which past history of either hematemesis or malena were present in most of the patients. Stigmata of chronic liver disease Dupuytren's contracture, palmar erythema 6, spider nevi 5 and sparse axillary hair were also seen in few patients.

Table 1: Presenting symptoms

Symptoms	Number	Percentage
Ascites	28	56%
Leg swelling	30	60%
Hepatomegaly	20	40%
Prominent anterior abdominal wall veins	17	34%
Hematemesis and malena	6	12%
Asymptomatic	18	36%

The most commonly identified endoscopic findings were esophageal varix(44%), gastritis (36%), portal hypertensive gastropathy (36%), hiatus hernia(12%). Gastric varix was identified in 4 % of patients. Endoscopy findings were normal in 12% patients. Among all patients 16 patients had mixed findings and few other findings (like duodenitis, esophagitis, esophageal candidiasis, hemorrhagic spots etc). Esophageal varix, gastritis, and portal hypertensive gastropathy were the commonest findings of chronic liver disease.

Table 2: Endoscopy findings of chronic liver disease patients

Endoscopy findings	Number	Percentage
esophageal varix	22	44%
gastritis	18	36%
portal hypertensive gastropathy	18	36%
hiatus hernia	6	12%
Gastric varix	2	4%
Normal	6	12%
Mixed findings	16	32%

DISCUSSION

Endoscopy is the gold standard for diagnosis of gastro intestinal diseases worldwide. In resource limited settings, especially when access to endoscopy service is limited, it is very important for clinicians to know common complications of CLD and what are the changes we can get from an endoscopy so that we can prevent or treat them early, as this is a health problem worldwide especially in developing countries like India where it put financial burden on national economy.

In this study, the prevalence of esophageal varices was 44% which correlate with the study by Ajayi et al [8]. in Ekiti, Nigeria . This figure is much less than the 96.1% prevalence reported by Adegboyega Akere, Kolawole O Akande [9], Ibadan, Nigeria, though both the study were is in the same geographic zone. Other findings of our study were gastritis (36%), portal hypertensive gastropathy (36%), hiatus hernia(12%). Gastric varix was identified in 4 % of patients. Endoscopy findings were normal in 12% patients.These findings are also not correlated with the study by Svoboda P et al [10]. In their study oesophagus varices was 64.9%, portal hypertension gastropathy was 45.7% and the peptic ulcer of the gastroduodenum was 25.8%. A normal diagnosis in the endoscopy of the upper digestive tract was found only in 8.6% [10].

Limitations of the present study included a relatively small sample size.

CONCLUSION

Upper gastro intestinal endoscopy has a high diagnostic value in the investigations of chronic liver disease. Most of the chronic liver disease patients (84%) had some findings related to CLD which were diagnosed with endoscopy and many more lesions can be seen in patients with chronic liver disease apart from varices.

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