A RARE CASE OF OESOPHAGODUODENAL VARICES
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ABSTRACT: Varices are sequelae of portal hypertension and can occur in both cirrhotic and noncirrhotic portal hypertension. They are commonly seen in the oesophagus and stomach. Presentation of varix in the duodenum is rare. The commonest site is in the duodenal bulb followed by the second and third parts of duodenum. The treatment of duodenal varices is challenging and various modalities of treatment are described in literature. Here, we present a case of oesophago-duodenal varices successfully treated by endoscopic variceal ligation for oesophageal varix and injection sclerotherapy for duodenal varix.

KEYWORDS: Duodenum, portal hypertension, varix.

INTRODUCTION: Duodenal varices are rare, occurring in only 0.4% of patients with portal hypertension.1 The commonest site is in the duodenal bulb, followed by the second part of duodenum.2 Bleeding is a rare and serious complication of duodenal varices and mortality rates are high. Upper gastrointestinal endoscopy (UGIE), endoscopic ultrasound (EUS) and angiography are the tools to detect duodenal varix.

We report a case of oesophago-duodenal varices with hypertensive portal gastropathy detected during UGIE, successfully treated by endoscopic band ligation for oesophageal varix and injection sclerotherapy for duodenal varix.

CASE REPORT: A 70year old male patient attended our hospital with repeated history of melena. There was no associated hematemesis. History of regular alcohol consumption for the last 20years was reported. Complete hemogram revealed hemoglobin of 6.5gm%. Aspartate transaminase, alanine transaminase and gamma glutamyl transferase were moderately increased in liver function test. However, alkaline phosphatase level was normal.

UGIE was performed two days later, after stabilization of the patient. UGIE revealed grade III oesophageal varices (Fig. 1), hypertensive portal gastropathy (Fig. 2) and duodenal varices in the second part of duodenum (Fig. 3).
The patient was managed by endoscopic band ligation for oesophageal varix and injection sclerotherapy by 3% polidocanol for duodenal varix. He was put on beta blockers and advised for regular checkup. At the last check up, 6 weeks after the first management, there was no sign of upper gastrointestinal bleeding and the varices were obliterated.

**DISCUSSION:** Gastroesophageal varices are common in patients with portal hypertension. However, duodenal varices are rare, occurring in 0.4% of patients with portal hypertension. Oesophago-duodenal varices are even rarer, with no case reported in the English literature so far. The commonest site is the duodenal bulb followed by the second and third parts of duodenum.

In the majority of cases, the etiology of duodenal varix is portal hypertension due to cirrhosis of the liver. A prehepatic cause due to portal or splenic vein thrombosis can also give rise to duodenal varix. The fact that the pancreaticoduodenal venous communication with the systemic venous system via the veins of Retzius is one of the four major portal-systemic communications, splanchnic hypertension would result in variceal dilatation at the duodenum.

Other rarer causes of duodenal varix can be adhesions due to previous abdominal surgeries where collaterals, within the wall of the duodenum may open up. Finally, there have been reports of formation of duodenal varices after injection sclerotherapy or ligation of esophageal or gastric varices. This is probably due to post-treatment alterations in the hemodynamics of portal flow.

The first report of bleeding from duodenal varices was presented by Alberti et al in 1931. Bleeding can be fatal and mortality rates may reach up to 35% to 40%. Endoscopic injection sclerotherapy (EIS) and endoscopic variceal ligation (EVL) are widely accepted primary therapies for esophageal variceal bleeding whereas bleeding gastric fundal varices are usually treated with cyanoacrylate injection or shunt procedures.

However there is no widely accepted treatment modality for duodenal varices. There is currently no consensus regarding the gold standard of treatment option of duodenal varix, may be, because of isolated cases. Injection of sclerosants, banding, shunt procedures are described in literatures with varying levels of success.

There are also reports of successful variceal obliteration using balloon-occluded retrograde transvenous obliteration (BRTO) and surgical procedures like over sewing/ligation of varices, duodenal dearterialization and stapling, duodenectomy or gastroduodenectomy.

Embolization therapy using radiological techniques is an alternative in the short term management of bleeding ectopic varices and controls bleeding in up to 94% of cases. However rebleeding rates over 1 year are high.
In our case, complete obliteration of the duodenal varix was seen 6 weeks after injection sclerotherapy and this case gives further evidence that sclerotherapy can be another good modality for the treatment of duodenal varix.

**CONCLUSION:** A rare lesion of oesophagoduodenal varix in a 70-year-old alcoholic man who has presented to us with repeated melena without any hematemesis has been reported. Duodenal varix is rare and can pose a difficult situation for successful treatment. The presentation of duodenal varix in second part of duodenum is very uncommon.

Endoscopic variceal ligation for both oesophageal and duodenal varix is considered as one of the best options. However, endoscopic sclerotherapy which is also chief and technically easy is also another option available.

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## CASE REPORT

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