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Review Article

DIEULAFOY'S LESION OF DUODENUM: A RARE CASE REPORT OF UPPER GASTROINTESTINAL BLEEDING

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ABSTRACT

Upper gastrointestinal (UGI) bleeding is commonly defined as bleeding arising from the esophagus, stomach or duodenum. Blood may be observed in vomit (hematemesis) or in altered form in the stool (Melena). Dieulafoy's lesion (DL) is an uncommon but important cause of recurrent UGI bleeding. DL is mostly located in the stomach within 6 cm of the gastoesophageal junction. Duodenum is the most common location approximately 14% in patient with DL.

In this article, we report a rare case of DL of duodenum in sixty five years old man, along with its management.

Keywords: *Upper Gastrointestinal bleeding, Dieulafoy's lesion, Hematemesis, Melena, nasogastric aspirate, Endoscopic therapy, Endoscopic Adrenaline Injection, Endoscopic band ligation, Hemoclip.*

CASE REPORT

The sixty five years old man patient presented to our hospital with three episodes of hematemesis and 6 month history of intermittent episodes of melena. There was no history of alcohol abuse or smoking habit, intake of Non Steroidal Anti- inflammatory Drugs (NSAIDs) and other disease like chronic liver diseases or acid peptic disease. There was no significant past medical history.

On clinical examination, there were no significant findings apart from severe pallor and tachycardia. Blood samples were taken and patient under IV antibiotic and symptomatic treatment was done. Laboratory investigation shows hemoglobin of 2.5gm/dl and hematocrit of 6%. Coagulation parameters were normal. Other biochemical investigation was also within normal range.

UGI endoscopy was performed which showed fresh blood and actively bleeding vessels in the postbulbular duodenum but the surrounding mucus were normal (Fig. 1, Fig. 2). The esophagus, stomach and second part of duodenum were normal. The diagnose of dieulafoy's lesion of duodenum was made. The lesion was injected with 1:10000 adrenaline solutions for control of bleeding. Blood transfusion was done by 5 unit of packed cell. After the blood transfusion hemoglobin was 6.8gm /dl and hematocrit was 20%. This patient had an uneventful recovery and had had no recurrence of bleeding at a 6 month follow-up visit.

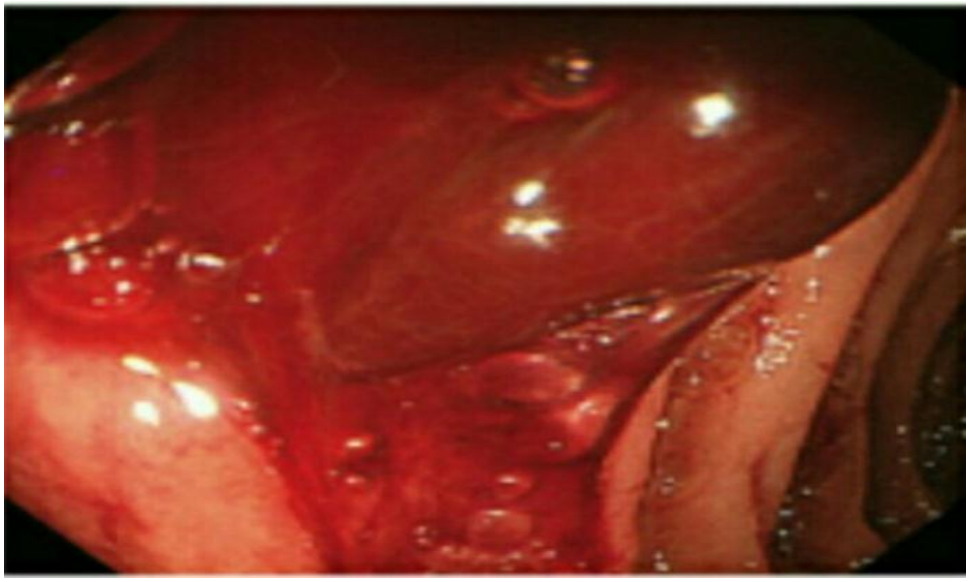

Figure 1: The adherent clots in the postbulbular duodenum.

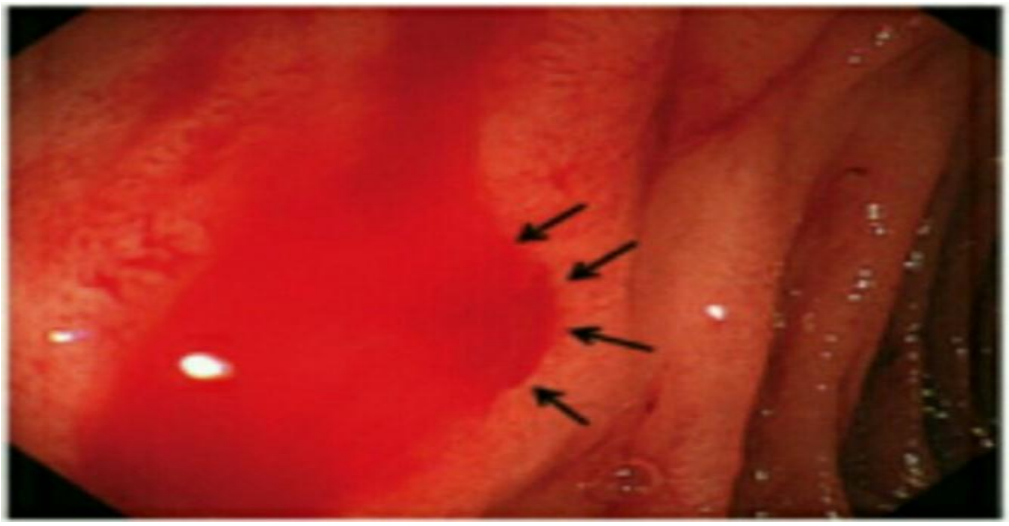

Figure 2: The active bleeding in postbulbular duodenum.

DISCUSSION

UGI bleeding is gastrointestinal bleeding in the upper gastrointestinal tract and commonly present with hematemesis or melena, resulting substantial morbidity, mortality and medical cost [1]. UGI affects around 50-150 people per 100,000 annually. Depending on its severity, it carries an estimated mortality risk of 11% [2].

There are various cause of UGI bleeding, among them dieulafoy's lesion is uncommon but important cause of recurrent UGI bleeding [3]. Recent publication estimate the DL could be the origin of up to 4-5% of UGI bleeding episodes [4, 5]. The actual incidence of UGI bleeding for DL is likely higher than estimated because the diagnosis remain difficult. The patients with DL usually have no history of dyspepsia or peptic ulcer disease [6]. Clinical presentation may include hematemesis alone (28%), melena alone (18) or hematemesis with melena (51 %) [7, 8].

DL is an inherently difficult lesion to diagnose and should be considered during evaluation of any patient with unexpalined, recurrent massive GI bleeding. Proper history should be taken such as intake of NSAID, alcohol and smoking habits, and other diseases like chronic liver disease and acid peptic disease [9]. The diagnosis is usually made endoscopically. Because of the intermittent pattern of bleeding on the site may be covered by a blood clots, thus repeated endoscopic examination is frequently necessary for the accurate diagnosis [10, 11]. Today angiography is a good additional diagnostic tool in difficult cases when endoscopy fails to identify the lesion in patient with active bleeding and poor surgical candidates [12]. However, UGI

endoscopy is preffered as it can be used as diagnostic and therapeutic tools [13].

Adrenaline injection has been used as a sole therapy or in combination with other endoscopic modalities for homeostasis. Multimodality therapy has been shown to be more effective then single modality in preventing recurrent bleeding and mechanical therapies, including endoscopic band ligation (EBL) and hemoclip application have been demonstrated to be least effective in achieving homeostasis and preventing further bleeding [7]. Surgical ligation is an alternate that can be considered for failed endoscopic therapy that is required in less than 5% cases [14].

CONCLUSION

Dieulafoy's of duodenum is an uncommon disorder that leads to relatively high morbidity. The correct diagnosis could be made only when endoscopy was carried out 24 hours later during another episode of active bleeding. Initial endoscopy is failed because of the intermittent pattern of bleeding so repeated endoscopy examination is frequently essential. Endoscopic adrenaline injection is an important technique for control of bleeding. Thus, early and careful endoscopy and increased awareness of the pathology is the main key for accurate diagnosis.

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