

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.aidm-online.com



CASE REPORT

Refractory gastric variceal bleeding secondary to splenic vein occlusion associated with abdominal lymphadenopathy



Yu-Chun Lin ^a, Yen-Bo Chen ^a, Po-Hao Liao ^a, Wen-Chi Chao ^b, Jiunn-Chang Lin ^c, Yu-Chung Hong ^d, Shen-Yung Wang ^{a,*}

Received 19 January 2016; received in revised form 14 March 2016; accepted 15 March 2016 Available online 26 April 2016

KEYWORDS

Gastric varices; Splenectomy; Splenic vein; Lymph node Summary Splenic vein occlusion caused by abdominal lymphadenopathy is rare. We herein present the case of a 80-year-old man with refractory isolated gastric variceal bleeding in the absence of pancreatic or liver disease. Left-sided portal hypertension was confirmed by angiography, and para-aortic lymphadenopathy compressing the splenic vein was identified by serial abdominal computed tomography. Endoscopic sclerosing therapy failed to treat the recurring gastric variceal hemorrhage. Therefore, splenectomy was suggested and the patient was successfully treated. The patient had been variceal bleeding free for 12 months since the surgery. In patients with isolated gastric varices but without advanced liver disease, a variety of diagnostic techniques should be attempted to elucidate the nature of portal hypertension, and left-sided portal hypertension should be suspected. For those cases in which endoscopic treatment failed to treat refractory gastric variceal bleeding, splenectomy can be an effective option.

Copyright © 2016, The Gastroenterological Society of Taiwan, The Digestive Endoscopy Society of Taiwan and Taiwan Association for the Study of the Liver. Published by Elsevier Taiwan LLC. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

^a Division of Gastroenterology, Department of Medicine, MacKay Memorial Hospital, Taipei, Taiwan

^b Division of Chest Medicine, Department of Medicine, MacKay Memorial Hospital, Taipei, Taiwan

^c Department of Surgery, MacKay Memorial Hospital, Taipei, Taiwan

^d Department of Radiology, MacKay Memorial Hospital, Taipei, Taiwan

^{*} Corresponding author. Division of Gastroenterology, Department of Medicine, MacKay Memorial Hospital Tamsui Branch, Number 47, Minquan Road, Tamsui District, New Taipei City 25173, Taiwan.

E-mail address: sywang@mmh.org.tw (S.-Y. Wang).

196 Y.-C. Lin et al.

Introduction

Gastric variceal bleeding is a serious complication of portal hypertension. Gastric varices (GVs) are found in about 20% patients with portal hypertension [1]. GV can occur in patients with intrahepatic portal hypertension caused by liver cirrhosis. It can also develop in patients with extrahepatic portal hypertension (e.g., left-sided portal hypertension).

Left-sided portal hypertension is associated with the formation of isolated GVs (IGVs) in the gastric fundus without esophageal varices. It can be caused by thrombosis, obstruction, or stenosis of the splenic vein. The most common cause of splenic vein obliteration is pancreatic pathology including acute or chronic pancreatitis and pancreatic neoplasm [2].

Abdominal lymphadenopathy is a rare cause of splenic vein occlusion (SVO). We herein report a case of recurrent IGV bleeding related to SVO caused by para-aortic lymphadenopathy, possibly related to tuberculosis, compressing the splenic vein. The patient was successfully treated by splenectomy. The literature was reviewed for this uncommon cause and presentation of GV bleeding.

Case Report

A 80-year-old man, who worked as a coal miner, was diagnosed with pulmonary tuberculosis about 20 years ago. He had received a complete course of tuberculosis treatment with isoniazid, ethambutol, rifampin, and pyrazinamide for 6 months. He did not have any history of liver or pancreatic disease. He experienced hematemesis, the first episode of gastrointestinal hemorrhage, 7 years prior to the most recent hospitalization. Esophagogastroduodenoscopy (EGD) revealed engorged GVs in the gastric cardia and fundus without esophageal varices. The GVs were obliterated by injection of a mixture of N-butyl-2-cyanoacrylate and Lipiodol (ethiodized oil). Despite a smooth recovery, he had been hospitalized a dozen times since the first presentation. However, the intervals between each hospitalization progressively shortened. Rebleeding of GV was confirmed by EGD and endoscopic obliterative therapy was attempted each time. Blood tests of liver biochemistries and serum levels of amylase and lipase had been within normal levels during these hospitalizations. There was no coagulopathy and the serological markers of hepatitis B or C virus were negative. Active pulmonary tuberculosis was excluded, as both sputum cultures and smears for tuberculosis were negative.

An abdominal ultrasound evaluation revealed portal hypertension by engorged portal vein and collateral vessels from the splenic hilum to the stomach without liver cirrhosis or ascites. A multiphase contrast-enhanced computed tomography (CT) scan revealed splenomegaly with prominent GVs, perigastric varices, and a small caliber of the splenic vein. CT revealed many enlarged lymph nodes with calcifications in the celiac axis and para-aortic regions (Figure 1B). The splenic vein was markedly narrowed and a lymph node was found compressing the splenic vein (Figure 2). The angiography showed patent portal veins and superior mesenteric artery (Figure 3). A superselective splenic portogram showed complete obliteration of the

splenic vein with multiple tortuous dilated collateral circulations from the splenic hilum and the gastric cardiac portion to the gastric antrum, with the terminal flow connecting to the main portal vein (Figure 3B). Based on these findings, left-sided portal hypertension was suggested.

Splenectomy was performed. Engorged veins were found at the perisplenic area and these were devascularized. Pathologically, the spleen was enlarged with thickening of the splenic capsule and congestion in the red pulps and prominence of the sinusoidal endothelial cells. Congestion of the perisplenic vessels and aggregation of hemosiderinladen macrophages were noted. The splenic vessels from the hilum were congested without thrombus. The pathology confirmed congestive splenomegaly. The GVs had regressed in the follow-up EGDs (Figure 4). The patient had been variceal bleeding free for 12 months since splenectomy.

Discussion

GVs can be classified into gastroesophageal varices (GOVs) and IGVs according to the classification proposed by Sarin and Kumar [3]. IGV is a rare condition associated with either generalized or left-sided portal hypertension. Generalized portal hypertension can be caused by obstruction to the portal vein due to external compression. thrombosis, or tumor invasion, or by increased vascular resistance in the liver caused by cirrhosis or noncirrhotic portal fibrosis. In generalized portal hypertension, increased pressure in the portal and splenic veins is transmitted through the short gastric vein and the gastroepiploic veins into the fundal venous plexus to form fundal GVs; GOVs are produced if the pressure is transmitted through the coronary vein. The extrahepatic portal vein is patent and the portal pressure is usually normal in left-sided portal hypertension due to SVO. The increased splenic venous pressure leads to reversal of blood flow through the short gastric vein, and the flow can enter the portal venous system via the coronary vein without resulting in esophageal varices [4]. It is important to identify the cause of IGVs as those related to general portal hypertension need more extensive management and cannot be effectively treated with splenectomy alone. IGV can be further subclassified as Type 1 IGV (IGV1), which is located in the gastric fundus, and Type 2 IGV (IGV2), which is located in the gastric antrum, corpus, or pylorus. IGV1 and IGV2 account for 8% and 2% of GVs, respectively [1]. Our patient is classified as a case of IGV1. Such subclassification is important in patients with IGV because the risk of bleeding is much greater in IGV1 (78%) than in that with IGV2 (10%) [1,3].

Left-sided portal hypertension should be suspected if IGV presented with splenomegaly but without evidence of liver diseases. The pancreatic diseases are the most common causes. Koklu et al [5] found that 39% of the cases were caused by pancreatitis and 22% by pancreatic tumors. Our patient, however, did not have any evidence of liver or pancreatic disease. The diagnosis of left-sided portal hypertension can be made by clinical, biochemical, and diagnostic imaging. CT scan images of our patient showed multiple calcified lymph nodes at the mediastinum, bilateral hilum, and para-aortic region. One of the calcified lymphadenopathies was located just anterior to the celiac

Download English Version:

https://daneshyari.com/en/article/8724532

Download Persian Version:

https://daneshyari.com/article/8724532

<u>Daneshyari.com</u>