Case of Young Patient with Portal Vein Thrombosis: complicated by Venous Bowel Ischemia

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ABSTRACT

A case of 26 years old Sudanese male patient, complain of sever epigastric pain associated with post prandial vomiting started before 1 week ,investigation done and confirm the diagnosis of portal vein thrombosis, and start management but unfortunately later on patient condition deteriorated and develop venous bowel ischemia that need surgical intervention.

Introduction

a common primary care complaint is abdominal pain, on other hand Portal vein thrombosis (PVT) is a rare cause of abdominal pain, especially in absence of liver cirrhosis or thrombophilia. The following report describes the presentation of PVT in a young male.

Portal vein thrombosis PVT:

Defined as complete or partial occlusion of portal vein or its terbutaries by thrombus formation.

Diagnosis of PVT depend mainly on imaging (Abdominal US, Abdominal CT, MRI)

Case Report

A case of 26 years old Sudanese male patient , medically free, admitted through ER of KFCH in Saudi Arabia at 24-12-2017 complain of epigastric pain since 1 week.

Patient was well until 1 week prior to admission when he start to complain of sever epigastric pain was sudden in onset progressive in course radiated to umbilicus, associated with nausea and vomiting three times aggravated by meal. No history of fever or jaundice, diarrhea or constipation or hematemesis or melena or dysuria, other systemic review unremarkable.

No Hx of chronic disease or any surgical intervention or trauma

No family Hx of similar condition or any suspected hematological disoreder running in family

No Hx of allergy or chronic use of medication

No Hx of alcohol or drug addiction

O/E:

Patient was conscious ,alert ,vitally stable : afebrile with blood pressure 125/85 and a heart rate of 56

SpO2 98% on room air.

did not demonstrate signs of icteric or pale sclera nor did he have jaundiced appearance or pale palmar creases

Abdomen: soft, lax, sever tenderness in epigastric area, liver and spleen not palpable, positive bowel sound, passing stool.

a rectal examination was negative for gross blood and was also negative for occult blood

Chest: clear ,equal air entery bilateral, no add sound

CVS: S1+S2+0

The laboratory evaluation was basically unremarkable and revealed a values within normal range.

But when do Abdominal US this show is echoic of the portal vein to liver parenchyma [1] and to make sure we order Doppler US which confirm present of cavernous transformation [2]

After that CT Abdomen with IV contrast done and confirm that : portal vein and splenic vein and superior mesenteric vein was all thrombosis [3]. Also, there is sever form of bowel ischemia manifested by thickening of bowel wall 'target sign' [4], pneumatosis intestinalis [5], and collection of moderate free fluid.

So diagnosis of PVT was establish and management of heparin start immediately.

But unfortunately after that patient need to enter operation room due to sever venous bowel ischemia and he small bowel restriction and end to end anastomosis done after that patient shifted to ICU for follow-up and further management. After 1 week patient has severe form of DIC and expired.

DISCUSSION

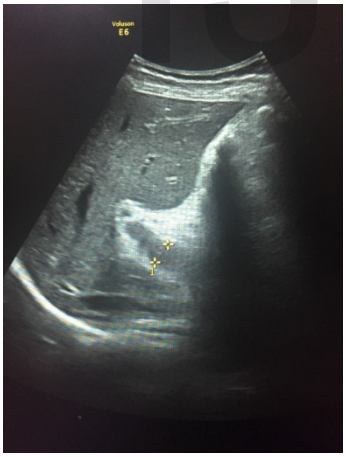
There is multiple complication but the most feared one is intestinal infarction with a mortality of 20-60%, leading to extended resections with a high risk of postoperative complications . In contrast to intestinal congestion, infarction often presents with persistent pain, hematochezia, guarding, contracture, ascites, or multiorgan failure with metabolic acidosis . In a usually urgently performed CT scan, the major findings can include hypo- or hyperattenuated wall thickening, dilatations, abnormal or absent wall enhancement, mesenteric stranding, ascites, pneumatosis, and portal venous gas . It is important to emphasize that this complication is usually found when the mesenteric veins are involved.

Conclusion

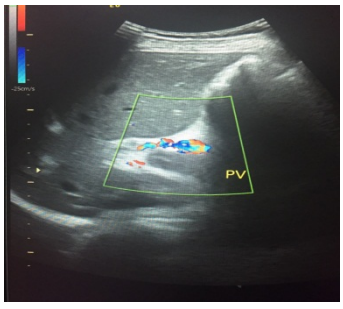
This case report serves as a reminder that a common presenting symptom such as abdominal pain in a young, healthy adult can be a manifestation of a rare diagnosis such as PVT. Literature supports that PVT outside the realm of liver cirrhosis is typically because of a hypercoagulable state, which warrants a methodic search for the specific thrombophilic etiology. The presence of PVT should be considered as a clue for prothrombotic disorders, liver disease, and other local and general factors that must be carefully investigated. Early anticoagulation seems to restore the vascular permeability in the majority of the cases. The management of possible complications like portal hypertension,bowel ischemia and biliary complications. It is hoped that this case report will help increase awareness of the complexity associated with portal vein thrombosis among the medical community..

Figure:

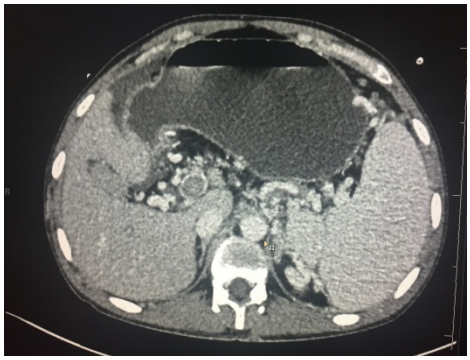
[1]



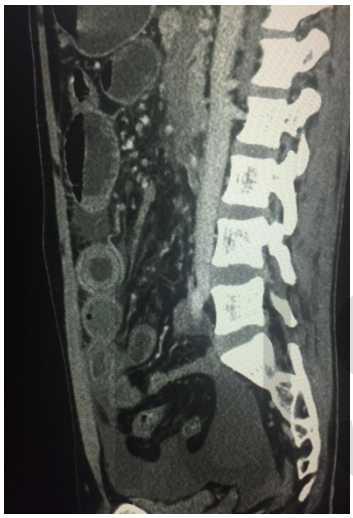
[2]



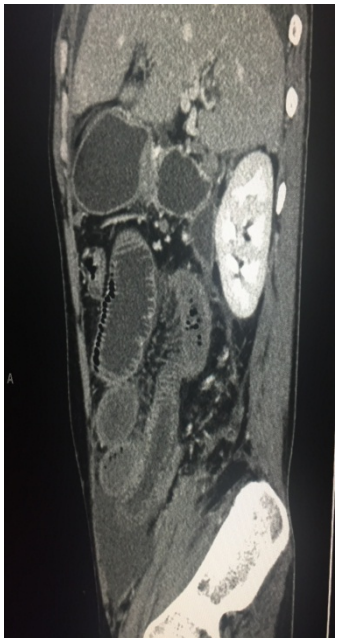
[3]



[4]



[5]



Refrrence

1- http://www.jabfm.org/content/21/3/237.full

2- http://www.liver.theclinics.com/article/S1089-3261(14)00094-4/abstract

3- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4513836/