



Is it APLA Causing Portal Vein Thrombosis with Portal Cavernoma ?

KEYWORDS

portal vein thrombosis Antiphospholipid antibody syndrome

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INTRODUCTION :

Portal vein thrombosis (PVT) is the blockage or narrowing of the portal vein by a thrombus. It is relatively rare and has linked with presence of underlying liver disease or pro-thrombotic disorders. (APLA –antiphospholipid antibody syndrome). However, no cause is identified in more than 25% of patients. Since lot of patients are asymptomatic and diagnosis is usually made in presence of complications. Abdominal pain is an interesting presentation of portal vein thrombosis, such as the patient presented in following case report.

CASE HISTORY:

A 39 year old female presented with complaints of abdominal distension & pain & black colored stool for 9 months and with no comorbidities. Past history of operation done for renal stones. No history of any abortions. she is well evaluated with history, physical examination, and various investigations which included BT,CT,PT/INR, usg abd, Doppler, CT abd, UGI scopy, acl antibodies IgG and IgM, β 2GP1-IgM, ANA.

EXAMINATION:

NO pallor, icterus, cyanosis, clubbing, lymphadenopathy, edema. JVP-normal
BP : 120/80mmHg

PR: 80/min

RR : 18/min

Temperature : afebrile

CVS: s1+ s2+ No murmur

P/A: Tenderness present in Right hypochondrium & epigastrium

no organomegaly,

RS :normal vesicular breath sounds heard bilaterally

No added sounds

CNS : NFND

INVESTIGATIONS:

ULTRASONOGRAM ABDOMEN : showing portal vein replaced by multiple collaterals (peripancreatic & omental collaterals, splenorenal, splenoepigastric collaterals) & multiple dilated & tortuous vessels noted in the portahepatis region proceeded by portal vein.

PORTAL VENOUS DOPPLER :

showed the caliber of main, right & left portal veins are significantly decreased with absence of flow due to chronic thrombosis & periportal collaterals seen & largest collateral measuring 8mm in diameter & velocity 15cm/sec.

CECT ABDOMEN:

chronic thrombosis of the portal vein & superior mesenteric vein with cavernous malformation of the portal vein & multiple collaterals and atrophy of lateral segment of left lobe of liver.

UPPER GASTROINTESTINAL SCOPY:

erythematous gastritis, no varices .

ANA: negative,

PROTEIN S AND C : normal

APLA IGM & B2-GPI-IGM : positive.

Repeat APLA IgG and IgM, β 2GP1-IgM are positive after 12 weeks.

Medical gastroenterology opinion obtained- suggested chronic Portal vein thrombosis 2^{to} APLA & advised to maintain INR between 2 to 3 & patient got discharged with T.pantoprazole 40 mg OD & syrup mucaine gel 5ml TDS & T.warfarin 3mg OD (at the time of discharge INR is 2.4)

DISCUSSION :

This is a case report of APLA causing portal vein thrombosis with portal cavernoma. APLA causing thrombosis incidence is 11%. In patients with APLA & venous thrombosis INR must be maintained 2-3.

Portal vein thrombosis refers to the development of thrombosis within the extra-hepatic portal venous system draining into the liver. It has been classified into 4 anatomic groups:

- (1)thrombosis confined to the portal vein beyond the confluence of the splenic and superior mesenteric vein (SMV);
- (2)extension of thrombus into the SMV but with patent mesenteric vessels;
- (3)diffuse thrombosis of splanchnic venous system but with large collaterals;
- (4)extensive splanchnic venous thrombosis but with only fine collaterals

Based on this classification, our patient had category 2 portal vein thrombosis.

- In patients developing heparin induced thrombocytopenia drugs such as fondaparinux 7.5 mg s/c daily (or) rivaroxaban 10mg OD can be given.
- Portal vein thrombosis is a rare occurrence of APLA.

- It is important that serum antiphospholipid antibodies should be investigated in patients with portal vein thrombosis of unexplained etiology and also in patients with unexplained signs of intestinal angina.
- Portal vein thrombosis develops in a variety of hypercoagulable states like protein C Protein S, or antithrombin III deficiency , including APLA

et al. "Portal Vein Thrombosis: Insight into Physiopathology, Diagnosis, and Treatment." *World Journal of Gastroenterology* : WJG 16, no. 2 (January 14, 2010): 143–55. doi:10.3748/wjg.v16.i2.143

Treatment of patients with APLA and portal vein thrombosis is difficult because of risk of bleeding and recurrent thrombosis if they do not receive appropriate life long term anticoagulation therapy

Treatment of associated risk factors like HTN, hypercholesterolemia and avoidance of prolonged immobilization should be taken care.

CONCLUSION:

Portal vein thrombosis is a rare disease, but our understanding of this disorder has improved during the last few years. 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 varices, portal hypertension, and biliary complications via endoscopic surveillance is key. It is hoped that this case report will help increase awareness of the complexity associated with portal vein thrombosis among the medical community.

figure - CECT abdomen -showing portal vein thrombosis with collaterals



REFERENCES :

1. Ronny Cohen, Thierry Mallet, Michael Gale, Remigiusz Soltys, and Pablo Loarte, "Portal Vein Thrombosis," *Case Reports in Vascular Medicine*, vol. 2015, Article ID 823063, 5 pages, 2015. doi:10.1155/2015/823063
2. Khamashta MA, Bertolaccini ML, Hughes GR. Antiphospholipid (Hughes) syndrome. *Autoimmunity* 2004;37:309-12
3. Hughes GR, Mackworth-Young C, Harris EN, Gharavi AE. Venocclusive disease in systemic lupus erythematosus: possible association with anticardiolipin antibodies? *Arthritis Rheum* 1984;27:1071
4. Ponziani, Francesca R, Maria A Zocco, Chiara Campanale, Emanuele Rinninella, Annalisa Tortora, Luca Di Maurizio, Giuseppe Bombardieri,