A Case Report on Budd Chiari Syndrome in a 40 Years Women with Vitamin K Supplement Administration and Recurrent Oral Cavity Ulcers

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ABSTRACT

Recurrent oral ulcers (Behcets syndrome) were known risk of causing Budd Chiari syndrome. Budd Chiari Syndrome caused by occlusion of the hepatic vein that drain the liver. Vitamin K, coagulant supplement worsens more of Budd Chiari syndrome. The purpose of this case report to present is an unusual case in India diagnosed with Budd Chiari Syndrome due to history of recurrent ulcers and Vitamin K administration due to past medical history of hemorrhagic anemia. The symptoms of Budd Chiari syndrome are abdominal pain, ascites, hepatomegaly, swelling of legs and ankles and itching. This disease with a sudden and severe onset may cause portal hypertension.

Case Presentation: A female patient of 40 years age was reported with a Budd Chiari syndrome a severe vascular complication in liver. Her blood picture reports decreased in hemoglobin percentage, increased in WBC count and her liver function reports high levels of SGOT, high levels of SGPT and low levels of total proteins and albumins. Ascitic fluid examination of peritoneum reveals high levels of polymorphonuclear neutrophils and high levels of lymphocytes. Ultrasound, Doppler ultrasound and Liver Biopsy results with change of liver structure and functions.

Conclusion: The patient suffers from anemia where Vitamin K supplements and her recurrent oral cavity ulcers makes the patient more worsening of Budd Chiari Syndrome. Although there is no known pathogenic mechanism but early diagnosis makes the less risk of severity of disease with an exact management.

Keywords: Budd Chiari Syndrome, Vitamin K, Behcets Syndrome, Hepatomegaly.

INTRODUCTION

A female patient who suffers from hemorrhagic anemia treated with Vitamin K a coagulant drug. She also suffers from oral cavity ulcers. The previous reports reveal Behcets syndrome has a link with thrombotic condition[1] and to this additionally Vitamin K supplement leads to severe complication of thrombosis.

The purpose of this article was to present a rare disorder in a middle age women of South India. As per review of previous reported cases Budd-Chiari syndrome is more common in women and usually presents in the third or fourth decade of life, although it may occur in children or older adults[2].

Budd Chiari syndrome affects the liver and blood vessels where blood flow into the liver has difficulty in being able to move out due to hepatic venous outflow obstruction[4]. This flow is partially blocked. If there an extensive blockage it blocks the large blood vessels which returns blood to the heart from the lower half of the body and particularly causes ankles and legs swollen. This is called peripheral edema[3]. The symptoms of BCS can present like abdominal pain in upper right quadrant, ascites, hepatomegaly[5], swelling of legs and ankles, itching. This is type of disease which occurs with a sudden and severe onset and may cause portal hypertension[8].

Although there is no known pathogenic mechanism the major complication of Budd Chiari syndrome is thrombosis in the hepatovenous blood vessels due to risk factors of behcets disease and additionally vitamin K supplements more worsened the condition.

Behcets syndrome is a multisystem disease with unknown etiology presents with mucous membrane ulceration. Vitamin K is a clotting factor can be given

as a supplement to the patient's hemorrhagic condition.

The diagnosis of Budd-Chiari syndrome can be done with the procedures of CT Scan, Ultrasound tests, Doppler ultrasound, liver biopsy and with lab investigations like complete blood picture, liver function tests[6,7,9].

SUBJECT AND METHOD

A Study was done in the process of retrospective manner in the secondary care hospital with the following steps

1. Isolated the case sheet which is founded as a unusual case
2. Noted the patient demographic details and his chief complaints
3. Analyzed the patients lab investigation reports
4. Report of final Diagnosis is followed

CASE PRESENTATION

A female patient with an age of 40 years has admitted to the secondary care hospital in Hyderabad with chief complaints of progressive distended stomach, pain over right upper quadrant region with difficulty in breath. She also had recurrent oral cavity ulcers. She was a known case of anemia due to hemorrhagic condition and was prescribed with the medications of tab folic acid 5mg, tab ferrous ascorbate and tab Vitamin K 5mg supplements. Now her bleeding is stopped and she was still continued with the medication without next review of her medical checkup.

On systemic examination she appeared as bulgy tummy and understood with the buildup of fluid in the abdominal area i.e. ascites. Over her ankle there was mild peripheral edema.

Her blood picture was founded with the reports like hemoglobin- 9.1 g/dl, WBC Count- 17500 cells/m^3, DLC of neutrophils-80%, lymphocytes-15%, monocytes- 1%, eosinophils-2%, Basophils-0% and platelet count- 3,10,000 cells/mm^3.

Her liver function tests were done and founded with total bilirubin-0.5 mg/dl, direct bilirubin-03 mg/dl, SGPT-3.51 IU, SGOT-298 IU, total protein-5 gm/dl, and albumin- 3.1 gm/dl.

Her biochemical reports of serum electrolytes like sodium-140 mEq/L, potassium-4 mEq/L, chloride-99 mEq/L, serum uric acid levels-4 g/dl.

Ascitic fluid examination from her peritoneum showed 5530 cell/mm^3 with polymorphonuclear neutrophils- 93% and lymphocytes- 7%.

Ultrasound tests of abdomen showed liver enlargement and dilated veins, Doppler ultrasound revealed blood flow in the hepatic vein was obstructed and normal blood flow pattern was reversed. The inferior venacava was narrowed. Liver Biopsy had shown a mild change of liver architecture and congestion of central lobules. The terminal hepatic veins were dilated and shown the perivenular fibrosis. Perivenular areas showed hepatocyte degeneration and necrosis. The portal tracts were with a mild fibrosis expansion. Finally it was confirmed as Budd Chiari Syndrome with an anemia with a provisional diagnosis of Behcets syndrome.

The patient went with the treatment of anticoagulants and venoplasty to keep a metal stent.

DISCUSSION

From the above case presentation it was understood that 40 years aged women was with recurrent oral ulcers, anemia and abnormal lab investigations like low levels of hemoglobin percentage leads to polycytemia, congestive heart failure and Chronic obstructive pulmonary disease, high levels of WBC Count leads to more acute infections, high levels of alanine aspartate and transaminase leads to liver damage, myocardial infarctions, decreased levels of total protein and albumin leads to dehydration, shock and chronic infections. Serum uric acid levels were also decreased. Ascitic fluid examination of peritoneum reveals high levels of polymorphonuclear neutrophils and lymphocytes leads to inflammation of peritoneum. Ultrasound, Doppler ultrasound and Liver Biopsy results with change liver structure and functions. All these abnormal reports decided the patient with a diagnosis of Budd Chiari Syndrome with an anemia and Behcets Syndrome.

The prevalence of thrombotic complications of Budd Chiari syndrome in patients with oral cavity ulcers are greater but to this additionally Vitamin K supplement which is a coagulant drug which makes the patient more worsen condition is a very rare condition.

CONCLUSIONS

In this case the patient suffers from anemia where Vitamin K supplements and her recurrent oral cavity ulcers makes the patient more worsening condition of liver damage by forming a vascular thrombosis in terminal inferior hepatic veins which leads to Budd Chiari Syndrome. Although there is no known pathogenic mechanism, early diagnosis makes the less risk of severity of disease with an exact management.

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