Reversible Malignant Hypertension due to Inferior Vena Cava Thrombosis

(A Case Report)

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SUMMARY

A case of primary thrombosis of the upper segment of the inferior vena cava, presenting as malignant hypertension is reported. Additional renal involvement in the form of tubulo-interstitial disease was also present in the case.

INTRODUCTION

Post-thrombotic obstruction of inferior vena cava (I.V.C.) has been recognised since Schenck,7 in 1644, described 2 cases at autopsy. The clinical features were established by Welch (1899)8 and Pleasants (1911),9 in a classic review of 314 cases. Obstruction to I.V.C. can present itself with varying symptomatology such as cardiac failure, cirrhosis, nephrotic syndrome etc.1,4,5 Here we are reporting a case who presented with malignant hypertension.

CASE REPORTS

Mrs. K., a 35 year old multiparous patient hailing from Central India presented to us with a history of distention of abdomen and oedema of feet of 3 months’ duration. The onset of distressment of abdomen was fairly sudden and increased rapidly over the first two weeks. There was no history of fever or prolonged bed rest prior to the event. There was no history of jaundice or any urinary complaints. The patient had delivered a normal child at full term 2 years ago. She was not on oral contraceptives. There was no history of consumption of any herbal medicines.

On examination, she was found to be pale; there was bilateral pitting oedema of the feet, the pulse was 86/min. and the blood pressure 180/130 mm of Hg in the right upper limb. Her initial weight was 57 kg. Clinically, she had features suggesting a left pleural effusion and a massive, tense ascites. There were no prominent veins over the abdominal wall. Liver and spleen could not be palpated. The fundus examination showed arteriolar narrowing, bilateral papilloedema with haemorrhages and exudates.

On investigating, her haemoglobin was 9 gm% with a WBC count of 10,000 per mm³ with polymorphs 70% and lymphocytes 30%. The bleeding time was 2 minutes, clotting time 6½ minutes, prothrombin time—26 seconds (control: 16 seconds), and clot retraction 1 hour; platelet count was 1.68 lacs/cumm. Fibrinogen—492 mg% and euglobin lysis time—3 hours. Her initial BUN was 17 mg% with a serum creatinine of 2.5 mg%; total protein was 6.5 gm% with albumin 3.5 gm%. The SGOT, SGPT, alkaline phosphatase and bilirubin were normal. Her urine examination showed albumin +++, with 24 hours' protein excretion of 2.5 gms. The culture did not show any growth. Both the pleural and ascitic fluids were transudates. An intravenous urogram failed to reveal any renal outlines or excretion. An inferior vena cavogram was done by transfemoral route which showed obstruction to the flow of dye in the upper segment (suprarehepatic portion) of the I.V.C. The rest of the I.V.C. was...
Fig. 1A.
Fig. 1: Antero-posterior (1A) and lateral (1B) views showing a block in the upper segment of the inferior vena cava.

Fig. 1B.

Fig. 2A.
Fig. 2: Antero-posterior (2A) and lateral (2B) views showing recanalisation of the inferior vena cava with the dye entering the heart.