

Case Report

Candida Albicans Endocarditis in a Haemophiliac Patient with Chronic Kidney Disease: A Case Report

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Abstract: Haemophilia is an X-linked recessive clotting disorder. Chronic kidney disease is a rare complication in haemophilia. The need for a long term hemodialysis in such patients necessitates the use of indwelling central venous catheter for prolonged periods. Fungal endocarditis due to an indwelling catheter is rare, but it is the most severe form of endocarditis. The difficulty of procuring a positive fungal blood culture, diagnosis of a pathogenic fungal species and the need for a treatment that is aggressive, yet has a poor prognosis makes this diagnosis quite a rarity. We are reporting a case of Haemophilia A with chronic kidney disease. Who developed Candida Albicans Endocarditis of the tricuspid valve due to long standing indwelling central venous catheter.

Keywords: Candida, Chronic kidney disease, Endocarditis, Haemophilia

INTRODUCTION

Haemophilia A is an X-linked recessive clotting disorder. Chronic kidney disease is a rare complication of this disorder [1]. Chronic kidney disease demands long term maintenance hemodialysis with a venous catheter in situ. A long term indwelling central venous catheter predisposes to fungal endocarditis [2]. Fungal endocarditis of the tricuspid valve due to indwelling catheter is a rare finding.

CASE REPORT

A 25 year old man, a known case of Haemophilia A with Chronic kidney disease, on maintenance hemodialysis twice a week came to the hospital with complaints of fever and persistent breathlessness since 3 days.

Family history of the patient was significant as the patient's brother was also suffering from Haemophilia A. The patient's mother and father were not symptomatic and the patient had no sisters.

The patient had an indwelling central venous catheter since 6 months for maintenance hemodialysis [Figure 1]. The patient was febrile (102^oF) at the time of examination and was pale. The pulse rate of the patient was 120 beats per minute and his blood pressure

was 150/80 mm Hg in the supine position. Rest general physical examination was unremarkable.



Fig-1: Indwelling central venous catheter in the patient

On systemic examination, the patient had bilateral basal crepitations, an ejection systolic murmur in the tricuspid area and diminished heart sounds in all areas. There was no evidence of organomegaly.

Laboratory data revealed haemoglobin 4.6gm/dl, total leukocyte count 17,600, DLC N83 L10 M05 E02, platelet count 1.43 lacs, urea 225, creatinine

10.5, Na 129.0, K 5.9, Cl 101, CRP 44.17, RA factor positive, PT 11.9 seconds, INR 1.04, APTT 42.9, Factor 8 assay 1.5%. RBS and liver function tests were normal. Viral markers (HIV, HBsAg, anti HCV) were negative.

2D Echo revealed a large 2.2×1.2cms freely mobile vegetation attached to tricuspid valve with evidence of moderate to large pericardial effusion. [Figure 2]



Fig-2: 2D-echo of the patient showing the vegetation

Three sets of blood cultures from three distant sites were taken and the cultures revealed a growth of candida albicans in two out of three subcultures. [Figure 3]

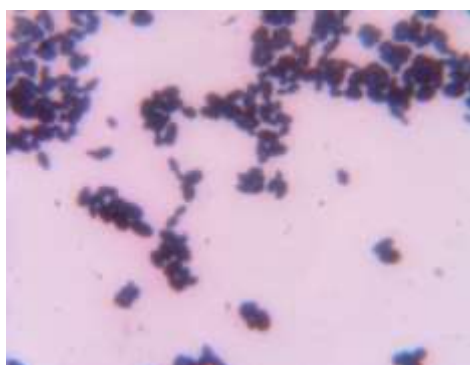


Fig-3: microscopic view of candida albicans cultured from indwelling central venous catheter of the patient

The patient was started on Amphotericin B and teicoplanin. He received two units of packed cells and four units of fresh frozen plasma, along with two courses of maintenance hemodialysis. The urea and creatinine levels post dialysis were 126.0 and 3.0 respectively. After three days of in-patient care, the

patient collapsed in the intensive care unit and could not be revived. Thus, the patient succumbed to the illness.

DISCUSSION

Haemophilia is an inherited clotting disorder caused by deficiency of factor VIII. Our patient had a significant family history as the patient's brother was also suffering from haemophilia. Based on the concentration of factor VIII, haemophilia is categorised into mild, moderate and severe illness where mild stands for factor VIII levels 5-30%, moderate stands for factor VIII levels 1-5% and severe hemophilia stands for factor VIII levels less than one percent [3]. Our patient was suffering from moderate haemophilia.

Chronic kidney disease in patients with haemophilia is rare. Concurrent systemic illnesses like diabetes, hypertension or retroviral illness have been explained as the mechanism of kidney injury in patients with haemophilia [1]. But, in our patient none of these systemic illnesses were present.

Long standing indwelling venous catheter has been attributed as a cause of fungal endocarditis. But fungal endocarditis of the tricuspid valve secondary to a long standing indwelling venous catheter is a rare finding.

Fungal vegetations are usually large in size and may require surgery for their elimination. Our patient had a poor general condition and succumbed to the illness. Hence the effect of antifungal therapy and need for surgery could not be studied.

Thus, a rare case of haemophilia A with chronic kidney disease who developed candida albicans endocarditis of the tricuspid valve is being reported.

Acknowledgement: The patient consent was received for this case report to be published

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