



## A RARE CAUSE OF ASCITES IN CHILDREN– A CASE REPORT

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**ABSTRACT** Constrictive pericarditis is an uncommon disease in childhood. In Majority of cases it is a diagnostic challenge because very rare and not readily recalled, uncharacteristic clinical picture so capable of mimicking other diseases. We report a rare case of chronic constrictive pericarditis in 12-year-old female child Dhanuja.

**KEYWORDS :** Constrictive pericarditis , Ascites, tuberculosis , restrictive cardiomyopathy , Ascites precox

**BACKGROUND :**

Constrictive pericarditis is caused by fibrosis and calcification of the pericardium, processes that inhibit diastolic filling of the heart. This condition has posed a diagnostic dilemma since it was first recognised clinically. Although many diagnostic approaches have become available subsequently, the diagnostic challenge remains. Because surgical intervention can provide complete relief of symptoms in many patients, accurate diagnosis of this disorder is important.

**Case Report**

12 years female child Dhanuja presented to OPD with Complaine of abdominal distension past 6 months, Facial puffiness past 3 months. History of breathlessness on exertion past 3 months and history of decrease urine output past 1 month.

No history of Fever / Jaundice / bleeding episodes / vomiting / loose stool / chest pain or palpitation.

ON EXAMINATION child had pallor present, B/L pedal edema present, no icterus, no lymphadenopathy, no cyanosis, mild JVP raised HR -92 /min, RR-26/min BP- 90/60mmHg SpO2 98% Height – 141 cm Wt.- 34 kg (falls under normal percentile) Tanner Staging I.

On Inspection abdominal uniformly distended, dilated veins present, umbilicus transverse slit. On palpation abdominal soft, distended, hepatomegaly present, liver span 12.5 cm left lobe of liver enlarged more than right lobe, consistency of liver is firm. No splenomegaly .Shifting dullness and fluid thrill also present. So a provisional diagnosis of chronic liver disease was made.

Showed CBC – N except HB 10.4 CRP Neg.  
Liver Function Test: Bilirubin 0.8 SGOT 25 SGPT- 15, ALP-184

Total Protein 5.8, Albumin 2.4, Serum Amylase 62, Serum Lipase – 50.

Eye Examination: No KF Ring.  
HIV, HbsAg – Negative

Ascitic Fluid analysis done Suggest of transudative effusion.

Ascitic fluid CBNAAT Negative for TB.

Abdomen USG: Ascites, Hepatomegaly, Portal Vein Normal.

CT Abdominal: moderate hepatomegaly, moderate ascites, enlarged right atrium, dilated IVC and Hepatic vein s/o passive hepatic congestion.

Since in our index case liver function was normal, we proceeded with

cardiac evaluation.

Cardiologist opinion was sought and ECHO was done

Showed Constrictive pericarditis or restrictive cardiomyopathy with good bi-ventricular function with mitral and tricuspid regurgitation.

Cardiologist suggested cardiac MRI from which diagnosis of constrictive pericarditis was confirmed.

Coronary artery calcium score showed dense calcium calcification noted in pericarditis with dilated bi-atrial chambers consistent with constrictive pericarditis.

**Treatment:**

The child was started on empirical antitubercular treatment.

After completion of course of ATT Child underwent pericardiectomy at higher center and is presently doing well with reduction of ascites and other symptoms.

**DISCUSSION**

Normally in right ventricular failure lower limb edema precedes ascites, but in right ventricular failure due to constrictive pericarditis ascites precedes lower limb edema called as Ascites precox , so mimicking ascites as a cause of liver or renal disorder. Clinical features are due to decreased ventricular filling and impaired myocardial contractility. Causes may be several, most frequently an infectious cause predominates. Long lasting symptoms of our patient was likely related of TB which progressed to pericardial constriction and so started on ATT though not useful. Transthoracic echo is first line of diagnosis but cannot differentiate between chronic constrictive pericarditis or restrictive cardiomyopathy. Cardiac MRI is used to confirm the diagnosis of constrictive pericarditis.

**CONCLUSION**

Chronic constrictive pericarditis should be considered in differential diagnosis of ascites with normal liver function in children. Low incidence is due to sub diagnosis and insidious character .Pediatricians should need high index of suspicion.

**REFERENCES**

1. SS Kothari, Ambuj Roy, VK Bahl. Chronic constrictive pericarditis. Indian Heart J 2003; 55: 303-305.
2. Holt BD. Management of effusive and constrictive pericardial heart disease. Circulation 2002; 105: 2939-2942.
3. Nisimura RA. Constrictive pericarditis in the modern era: A diagnostic dilemma. Heart 2001; 86: 619-623.
4. Myeres RB, Spodick DH. Constrictive periaeditis: clinical and pathologic characteristics. Am Heart J 1999; 138: 219-232.
5. Raffia H Mosieri J. Constrictive pericarditis in Saudi arabia. East Afr Med J. 1990; 67: 609-613.