Ascites - Rare Manifestation of Right Atrial Myxoma

Ganesh Narayan Jha

Abstract
Right atrial myxoma is less commonly found. Ascites is a rarer clinical presentation of such myxoma. Sometimes, practicing doctors are unable to detect causes of transudative ascites. In such situation, a high index of suspicion is needed to arrive at the correct diagnosis of right atrial myxoma giving rise to ascites.

Introduction
Primary tumours of heart are rare across all age groups, with a reported prevalence of 0.001-0.03% in autopsy series. The commonest of these primary tumours are myxoma, and of the myxomas 75% occur in the left atrium, and 25% in the right atrium, and occasionally in the ventricle. A few cases of right atrial myxoma obstructing inferior vena cava have been reported till date.

In most of the cases it is recognised by various systemic manifestations produced by release of inflammatory cytokines such as interleukin-6, cardiac manifestations or embolisation. This case report demonstrates a rare form of right atrial myxoma obstructing completely the flow of inferior vena cava and tricuspid valve partially, leading to ascites.

Case Report
A 55 year Hindu male patient without significant past medical or surgical history presented with two weeks duration of progressive abdominal swelling with decreased appetite.

On examination, pulse was 60/min, irregular and BP was 100/70 mmHg with postural hypotension. There was no icterus, pallor, increased JVP but mild bilateral pitting pedal oedema. On examination of abdomen there was ascites. Cardiovascular system examination revealed slow rate atrial fibrillation. Examination of chest was unremarkable.

Investigation revealed haemoglobin 13 gm/dl, total white cell count 11,300/cmm with normal differentials, ESR 25 mm at 1 hr, serum bilirubin 0.81 mg/dl, serum albumin 3.4 gm/dl, SGPT 22 U/L, alkaline phosphatase 127 IU/L, PT 12 Sec. with INR 1.00. The random plasma glucose level was 142 mg/dl. Immunoassay for HBsAg and ELISA HIV were negative. Serum urea, creatinine and urinanalysis were within normal limits. Ultrasonography of the abdomen suggested mild/moderate ascites and prominent inferior vena cava. X ray chest PA view was normal. ECG suggested slow rate atrial fibrillation. Ascitic fluid was transudative with ADA level 16.

The patient was put on tab aldactone (spironolactone) 25 mg twice daily considering ascites due to hepatic cause. Next day, he complained giddiness. We stopped tab aldactone and suggested echocardiography to exclude cardiac cause in the face of slow rate atrial fibrillation and prominent IVC on transabdominal USG. Transthoracic Echocardiography revealed right atrial myxoma obstructing flow of inferior vena cava completely and tricuspid valve partially and grossly enlarged IVC (22.8 mm) (Figure 1 and 2). Patient was diagnosed as a case of right atrial myxoma and ultimately referred to higher centre for surgical excision of tumour.
Right atrial myxoma caused transudative ascites and peripheral oedema due to inferior vena cava obstruction.

Obstruction of inferior vena cava was causing less blood flow to pulmonary circulation therefore less blood flow to systemic circulation, ultimately causing low BP and giddiness.

The large atrial myxoma somehow produced arrhythmogenic effect leading to atrial fibrillation. Decreased appetite of patient may be explained by systemic effect of the tumour.

**Conclusion**

Practicing doctors may be advised to look for right atrial myxoma as a cause of transudative ascites, if not otherwise explained.

**Consent**

Written informed consent was obtained from the patient.

**References**