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## Right Atrial Thrombus Associated with Pyopericardium

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Myxomas and thrombi constitute the majority of a long list of right atrial masses detected on echocardiography(1). Free floating or adherent right atrial thrombi are seen either as a complication of deep vein thrombosis or as an iatrogenic complication of central venous catheters. Recently, we came across a child with a right atrial mass which disappeared after two days, making

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us believe that it was a thrombus. In addition, there was an associated pyogenic pericardial effusion. This is an unusual association and has not been reported so far.

### Case Report

An 18-month-old boy, was admitted with fever, cough and breathlessness of one month duration. In spite of treatment with various antimicrobials, the response was inadequate. He had history of recurrent chest infections in the past. However, there was no history suggestive of congestive cardiac failure. On physical examination he was a sick child with heart rate of 100/min, respiratory rate 40/min and blood pressure 80/60 mm Hg. There was mild peripheral cyanosis, but no pallor or edema. The neck veins were engorged. Chest examination showed bilateral crepts, while in the CVS there was cardiomegaly and muffled heart sounds. There were no murmurs. Liver was palpable 8.5 cm below costal margin but there was no splenomegaly or ascites. Chest X-ray showed an enlarged cardiac silhouette. A provisional diagnosis of pericardial effusion was made. He was taken up for echocardiography which confirmed massive pericardial effusion.

In addition, a well defined round and

smooth mass (14 mm x 14 mm) was seen in right atrium attached to the free wall, close to the tricuspid annulus. This finding was confirmed both in parasternal long axis and apical four chamber views. An emergency pericardiocentesis was done (100 ml of thick pus removed), followed by a pleuropericardial window which drained another 80 ml of blood stained fluid. The pericardium was adherent to myocardium and separable only at base of great vessels. Therapy with injectable crystalline penicillin, cloxacillin and gentamicin was begun. In view of the suspected thrombosis, heparin was also started. Repeat echocardiography performed two days after hospitalization failed to show the right atrial mass. Child became afebrile after 4 days and was finally discharged from hospital after an uneventful recovery. Subsequent echocardiography, performed at regular intervals thereafter, has failed to show any recurrence over 8 months of close follow-up.

### Discussion

Majority of right atrial thrombi in children are seen as a complication -of indwelling catheters(2). On the other hand, in adults a substantial number have deep vein thrombosis as a predisposing factor(3). Thrombi are usually "grainy" and show similar echodensity as myocardium, whereas myxomas are more homogenous and more dense(3). Examination from right parasternal position is said to give a better diagnostic yield(5). As the risk of embolization is high(6), it is recommended that thrombi be treated with heparin or thrombolytics followed by surgical removal(8). However, there are reports in the literature of early spontaneous resolution resulting in complete clinical recovery, like in the present case(4).

Interesting finding in this case was the coexisting pericardial effusion which could possibly also have contributed to thrombus formation. We know of only one report where pericardial effusion preceded detection of thrombus in a patient of congestive cardiomyopathy(9). Could the low output state because of severe right heart failure, as a result of massive pyopericardium, be a predisposing factor for the thrombus? This explanation remains a conjecture as massive pericardial effusions are rather common but are almost never associated with atrial thrombi.

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## Cyproheptadine in Severe Anorexia

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Tuberculous meningitis (TBM) is known to give rise to many complications and sequelae, including hypothalamic damage. We report a case of TBM with marked anorexia and its management.

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## Case Report

A 4-year-old girl was diagnosed to have TBM on the basis of history, abnormal CSF findings and a CT scan showing moderate hydrocephalus and basal exudates. She was treated with a combination of streptomycin, isoniazid, rifampicin and pyrazinamide. She also received oral phenobarbitone for convulsions and mannitol and acetazolamide. The sensorium improved on the 6th day, only after a ventriculoperitoneal shunt was inserted. Her neurologic status and mentation was normal within 30 days of therapy. However, she had to be discharged on tube feeds since she had severe anorexia.

A month later, during the second admission for drug induced hepatitis she was noticed to have signs of undernutrition, anemia, xerosis and edema feet. Oral feeding was unsuccessfully attempted again after improvement in liver functions. There was no evidence of shunt dysfunction at anytime. A repeat lumbar puncture showed considerable improvement in the CSF. A psychiatry opinion ruled out maternal neglect or disturbed parent-child relationship.

Eight weeks after the first admission, oral cyproheptadine was started in a dose of