Poster No.17

MOBILE RIGHT HEART MASS – THROMBUS OR MYXOMA

SHANMUGANATHAN.V,WONG CK

HOSPITAL MIRI, SARAWAK, MALAYSIA

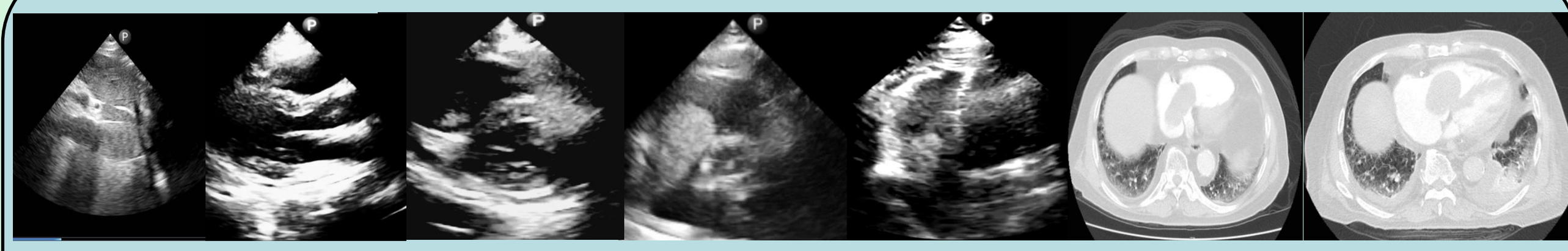
INTRODUCTION

Right heart mass which can be tumour or thrombus, is a rare and incidental finding. It is important to diagnose right heart mass because each differential can lead to different management and outcome. Here we present a case of right heart thrombus in transit.

CASE REPORT

A 78-year-old man with underlying triple vessel disease, end stage renal failure with regular haemodialysis, diabetes mellitus and hypertension presented to the emergency department with complaints of exertional dyspnea and intermittent dry cough for two weeks. On arrival, his vitals were stable and was able to saturate under room air with SPO2 96%.Electrocardiography shows normal sinus rhythm. Chest X-ray showed cardiomegaly .Transthoracic echocardiography (TTE) showed an ovoid shaped mass, measuring 5.8 x 3.1 cm moving from right atrium (RA) to right ventricle (RV) and continues to the inferior vena cava. The (RA) and (RV) appear dilated. Computed tomography pulmonary angiogram (CTPA) was done twice. There was no pulmonary embolism from first CTPA, but subsequent scan revealed filling defects in pulmonary artery supplying the right lower lobe with unchanged soft tissue lesion in right heart extending into inferior vena cava(IVC). The patient was started on subcutaneous enoxaparin in the ward and discharged well with oral anticoagulant.

FIGURES



a)Fig 1: Thrombus in IVC

b)Fig 2: PLAX view

c)Fig 3: PSAX view showing thrombus in RV

d)Fig 4: PSAX view at aortic level shows thrombus

e)Fig 5: Axial view showing mobile mass in right heart.

f)Fig 6 : First CTPA

g) Fig 7: Repeated CTPA

DISCUSSION

The classic echocardiographic features to differentiate myxoma from atrial thrombus are that the thrombi are irregular, laminated and immobile with broad base attached to posterior atrial wall. However this description holds true only for in situ atrial thrombi and not for secondary atrial thrombi. Secondary atrial thrombi are usually from peripheral veins such as IVC and are hence mobile. They are often referred to as clot in transit (CIT) as they are on their way to be dislodged to the pulmonary arteries. They are described as spherical, grapelike, ovoid mass moving within the RA. When large, they may prolapse through RV and appear free floating with no attachment site. Right heart thrombus(RHT) morphology can also be divided into type A- thin, highly mobile, serpiginous; type B-immobile and ovoid and type C- characterised by combination of type A and type B, which is highly mobile but globular.

CONCLUSION

Differentiating a right heart thrombus from myxoma is crucial as they are managed differentially. In this patient, features favoring RA thrombus are history of three vessel disease (thrombus occlusion) and abnormal attachment of mass (IVC-RA junction).

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DECLARATION OF CONFLICT

The authors report there is no declaration of conflict

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