A CASE REPORT: CARDIAC TUMOUR MIMICKING HEART FAILURE

QIN JIAN LOW[1], SENG WEE CHEO[2]

Abstract

Primary cardiac tumor are extremely rare. Incidence is approximately 0.017-0.019% of all primary tumor. An early diagnosis of cardiac tumor may improve the outcome.

Keyword: *Primary cardiac tumor.*

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Introduction

Primary cardiac tumor are mostly benign with the majority being myxomas[1]. The commonest malignant tumor is angiosarcoma. Benign cardiac tumor have normal life expectancy after surgical resection[2]. Patients with malignant cardiac tumor have poor prognosis even after surgical intervention[2]. Diagnosis are made by 2D echocardiography, cardiac computed tomography, cardiac magnetic resonance imaging and confirmed with tissue biopsy[3]. Complete resection of the tumor remains the best treatment available with or without adjuvant chemotherapy[3]. This case highlights the importance of echocardiography in picking up the cardiac tumor in a patient who presented with heart failure symptoms.

Case Report

An 87-year-old gentleman with underlying hypertension presented with symptoms of decompensated heart failure. He experienced worsening dyspnea, orthopnea and paroxysmal nocturnal dyspnea for 2 weeks. Clinically, he had a raised jugular venous pressure, bi-basal crepitations and bipedal oedema. His chest X-ray showed cardiomegaly. He was given oxygen supplementation with intravenous frusemide for diuresis effect. A bedside transthoracic echocardiography (TTE) showed a well-defined mass at his right heart compressing on to his right ventricle outflow tract. Cardiac MRI showed an infiltrative homogenous mass involving the right arterio-ventricular groove extending along the right ventricle free wall and outflow tract enveloping the ascending aorta and pulmonary trunk as well as the pericardium with global moderate pericardial effusion. There was no obvious mediastinal or axillary lymphadenopathy. Computed tomography of the thorax and abdomen did not show any mass or lymph nodes. The imaging findings was suggestive of primary cardiac lymphoma or sarcoma. Due to his advanced age, he refused any pericardial tapping or biopsy of the cardiac mass. He opted for best supportive care. He passed away after two months.

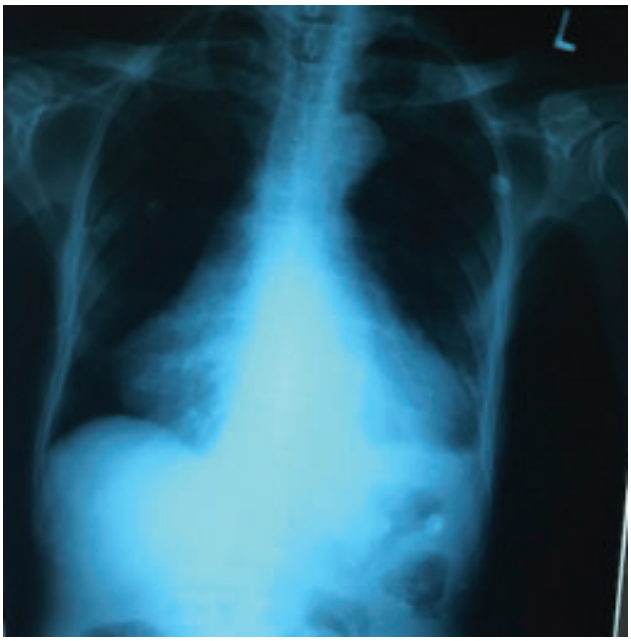

Fig.-1(Above) : *Chest radiography shows cardiomegaly.*

1. Department of Internal Medicine, Hospital Sultanah Nora Ismail, Johor, Malaysia.
2. Department of Internal Medicine, Hospital Lahad Datu, Sabah, Malaysia.

Address of Correspondence: Dr. Qin Jian Low, Department of Internal Medicine, Hospital Sultanah Nora Ismail, Johor, Malaysia.

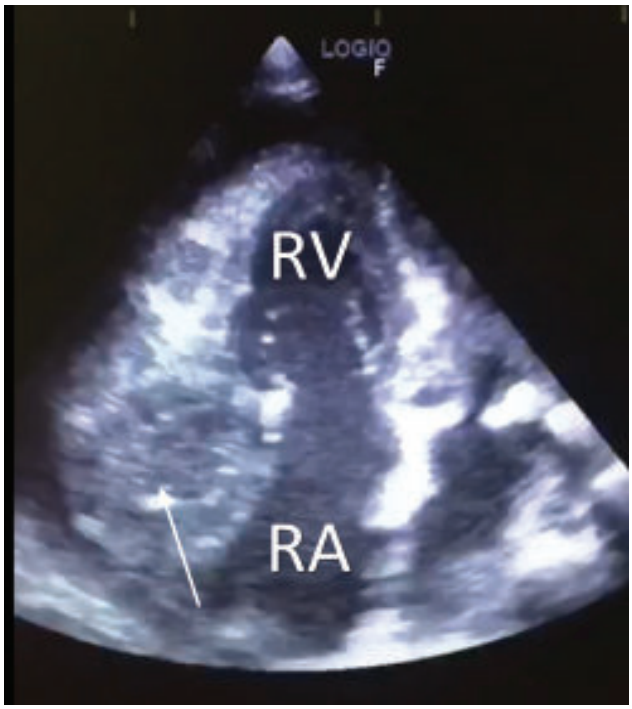

Fig.-2 (Above): *Transthoracic echocardiography shows a mass in the right heart compressing onto the right ventricular outflow tract.*

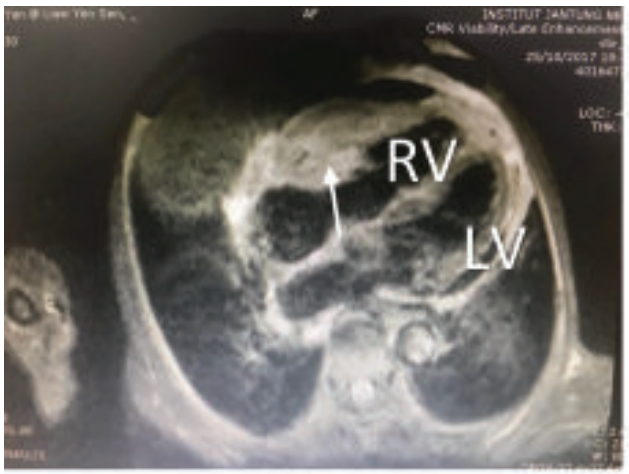

Fig.-3 (Above): *Cardiac MRI STIR Image*

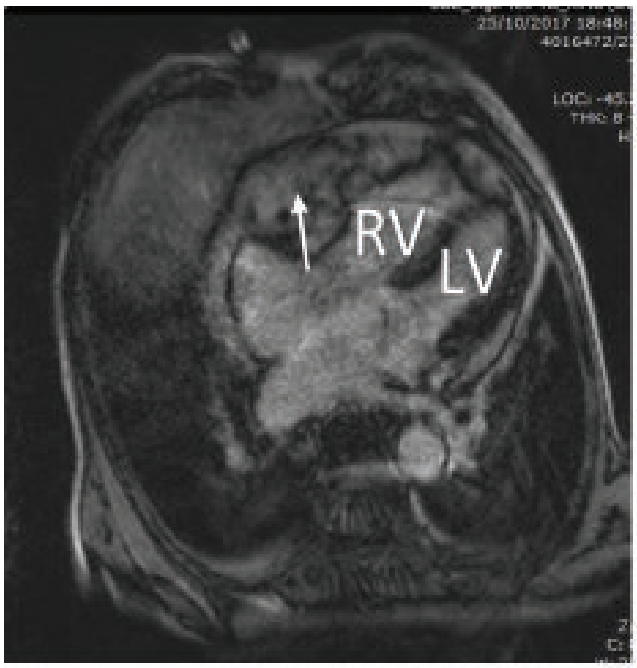

Figure 4 (Above) : *Cardiac MRI shows late gadolinum enhancement.*

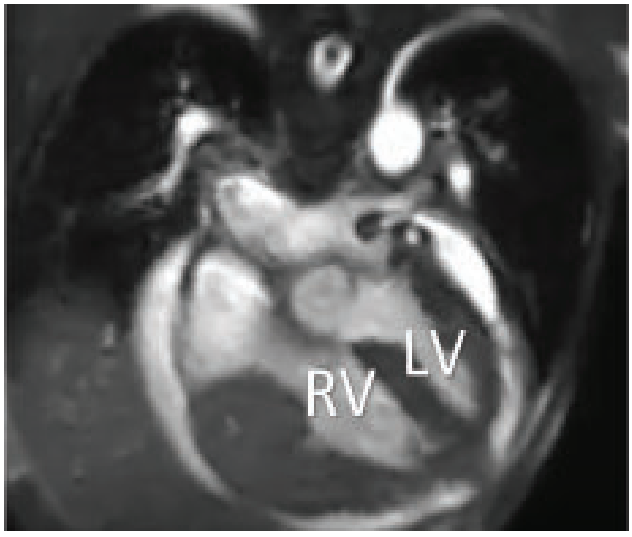

Fig.-5 (Above) : *Cardiac MRI - MRI cine*

Discussion

Primary cardiac tumor is extremely rare. Incidence is approximately 0.017-0.019% of all primary tumor[1]. Primary cardiac tumor are mostly benign with the majority being myxomas. The commonest malignant tumor is angiosarcoma[2]. Benign cardiac tumor have normal life expectancy after surgical resection. Tumors arising in the right atrium grow into the atrial lumen and cause obstruction of the blood flow. This may produce hemodynamic changes similar to those seen with tricuspid stenosis[2]. Tumor fragments may be released into the pulmonary circulation causing symptoms consistent with pulmonary emboli. Patient with malignant cardiac tumor have poor prognosis even after surgical intervention[3]. Diagnosis are made by 2D echocardiography, cardiac CT, MRI and confirmed with tissue biopsy. Complete resection of the tumor remains the best treatment available with or without adjuvant chemotherapy[3].

Conclusion

Cardiac tumor may present with few symptoms and remain silent until an advanced age, thus limiting the few therapeutic options available. The importance of this case relies on the early recognition of symptoms as in our patient who presented with heart failure. Unfortunately, our patient refused tissue biopsy due to his advanced age..

Acknowledgement

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Conflict of interest

The authors declare that they have no competing interests.

Consent

Written informed consent was obtained from the patient to publish the case. A copy of the written consent is available for review by the Chief Editor of this journal.

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Nil.

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