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A Case Report of Incidental Pericardial Hemangioma

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ABSTRACT
Cardiac hemangiomas arebenign neoplasms of the heart that are exceedingly rare.Pericardial hemangioma is a rare subtype of cardiac hemangioma which is location specific and is seen as an incidental finding. Patients with pericardial hemangiomas are usually asymptomatic, symptoms often vary according to the size and localization of the tumor.

KEYWORDS: Cardiac tumours, Pericardial haemangioma, Cavernous haemangioma,

I.INTRODUCTION

Primary tumors of the heart are rare. Pericardial hemangioma accounts for 2 to 5% of benign neoplasms of the heart. They can arise from either pericardium (visceral or parietal) /myocardium/endocardium with visceral pericardium being the most common site. They are usually incidental finding. Symptomatic patients can present with dyspnoea, palpitation, arrythmia, atypical chest pain, cardiac tamponade. The symptoms vary depending on the size, location and degree of invasion. We present a case of, incidental finding of pericardial haemangioma in a patient with congenital heart disease.

II.CASE REPORT

A 45-year-old male presented to the cardiac out patient department with complaints of chest pain of sudden onset which was non-radiating, non-aggravating and lingering type with1-day duration. The patient was admitted for further evaluation, on admission his blood pressure was 120/80mmHg, pulse rate -96 beats per minute, respiratory rate-18 per minute and SpO2 of 98% at room air. On examination he had Ejection systolic murmur, delayed fixed A2-P2. Respiratory system examination revealed bilateral normal vesicular breath sounds, central nervous system and per abdominal examination was unremarkable. His ECG showed RBBB; rSR in V2, his chest X-ray was with in normal limits, 2D ECHO revealed presence of congenital heart disease, 3ASD's with left to right shunt, dilated RA-RV, mild TR, normal LV systolic function, LVEF60%, RWMA. No clot, vegetation or pericardial effusion was found. Coronary angiogram was done which revealed normal epicardial coronaries, he was then referred to cardiothoracic vascular surgery department for the closure of ASD. Pericardial patch closure of ASD was done, and incidentally a small haemangioma over parietal pericardium with no extension of mass into cardiac chambers was found. The lesion was excised and sent for histopathological examination.

The gross examination showed a membranous tissue along with a fibrofatty tissue mass measuring 6 x 3.5 x1.5 cm. the outer surface of the fibrofatty tissue showed a haemorrhagic area measuring 2.5 x1 x 0.6 cm, cut surface of the haemorrhagic area was pale brown.

Microscopic examination showed sheets of mature adipocytes. Amidst the adipocytes large blood vessels were seen. The blood vessels were lined by flattened endothelial and contained erythrocytes. One large vessel adjacent to the lesion showed organising thrombus. Pathological diagnosis of cavernous haemangioma was made.The patient was eventually discharged and showed recovery on follow up.

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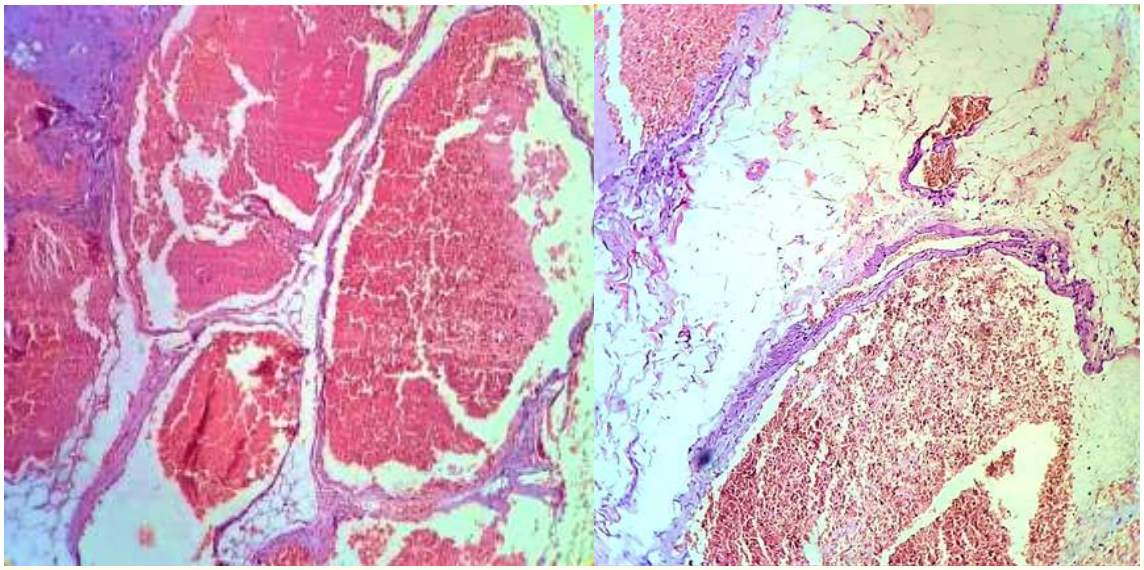

First image showing multiple cavernous spaces filled with RBCs. (H&E, 10X), second image showing mature adipocytes and cavernous spaces lined by single layer of endothelial cells, filled with blood. (H&E, 40X).

III.DISCUSSION

Haemangiomas are benign tumours that are mainly composed of blood vessels andare histologically classified into capillary and cavernous type [1].Cardiac tumours are rare tumours, of that pericardial haemangiomas are rarest primary tumours of the heart and comprise 2% to 5% of benign cardiac tumours [1]. They may arise from the endocardium, myocardium, visceral or parietal pericardium. Usually seen in ventricles followed by atria [2].The diagnosis of cardiac tumors are made by radiological assistance with transthoracic echocardiography, computed tomography, magnetic resonance imaging or cardiac catheterization. The utility of echo-cardiography in diagnosis of haemangioma is limited [3].Pericardial haemangiomas are clinically insignificant and often incidental finding. In our case, the tumour was found to arise from the parietal aspect of pericardium and with no extension into the cardiac chambers in a patient with congenital heart disease.

Pericardial haemangiomas are composed of vascular spaces, lined by endothelial cells, and they are classified histologically into three types: 1. Cavernous type in which tumours are composed of numerous dilated, thin-walled vascular spaces which are lined by flattened endothelium, 2. Capillary type is composed of capillary like vessels and lined by plump endothelial cells and 3.Arteriovenous type withthe dysplastic malformed arteries and veins [4].

In our case, tumour was of cavernous type and is arising from the parietal pericardium.Pericardial haemangiomas can be dormant or they can show accelerated growth or they can have spontaneous regression.For treatment operative removal of the tumour is preferred for diagnostic purpose and to avoid the mechanical complications due to the compressive nature of the tumour [4,5,6]. If untreated the can lead to cardiac tamponade and sudden death.

IV.CONCLUSION

Pericardial haemangiomas are extremely rare tumours, the preoperative diagnosis is difficult with only few cases being reported. Radiology can aid in detecting and for early diagnosis and treatment. In most of the cases pericardial hemangiomas are incidental finding when there isno mechanical complications are associated with it.

Pathologically pericardial haemangiomas are similar to other cavernous haemangiomas.

REFERENCES

[1]. Sabeti S, Zahedifard S, Soleimantabar H, Zarghampour M, Toutkaboni[MP. Coexistence of pericardial and hepatic hemangiomas. Iran J Pathol. 2015;10(2):169–72.

[2]. Zeina AR, Zaid G, Sharif D, Rosenschein U, Barmeir E. Huge pericardial hemangioma imaging. Circulation. 2007;115(10):315–18.

[3]. Yoshikawa M, Hayashi T, Sato T, Akiba T, Watarai J, Nakamura C. A case of pericardial hemangioma with consumption coagulopathy cured by radiotherapy. PediatrRadiol. 1987; 17:149–50.

[4]. Rufus Sam Vargis et al., Pericardial Haemangioma: Case Report and Systematic Review of Literature J Clin Diagnostic Res. 2017 May, Vol-11(5): ED15-ED17.
[5]. Gupta N. Intrapericardial hemangioma: A case report. J Clin Diagnostic Res. 2013;7(1):169–70.
[6]. Ben Youssef A, Zairi S, Ouerghi S, Ayadi A, Bousnina M, Berraies F, et al. Epicardial cavernous hemangioma : a two - case reports. Tunis Med. 2014; 92:268–71.