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RECURRENCE OF A PERICARDIAL MASS INITIALLY DIAGNOSED AS HAEMANGIOMA: A CASE OF SYNOVIAL SARCOMA IN A YOUNG MALE

Cardiology

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ABSTRACT

We present a rare case of synovial sarcoma of the pericardium in a young male, initially misdiagnosed as a benign haemangioma. The patient underwent surgical excision of the pericardial mass with a provisional diagnosis of haemangioma. However, recurrence occurred within a year, prompting re-evaluation. Histopathology and immunohistochemistry of the recurrent mass confirmed the diagnosis of monophasic synovial sarcoma. This case highlights the diagnostic challenge posed by rare pericardial tumors and emphasizes the importance of thorough histological assessment. Early recognition and accurate diagnosis are crucial for appropriate management and to reduce the risk of recurrence and metastasis in such cases.

KEYWORDS

INTRODUCTION

Pericardial synovial sarcoma is an exceptionally rare primary malignant tumor of the heart,shown in figure This case report details the diagnostic journey of a male with a pericardial mass initially misdiagnosed as a benign hemangioma, later revealed to be synovial sarcoma.

Case

A 26-year-old male presented with dyspnoea (NYHA II) and atypical chest pain for one month. An echocardiogram showed an 80×40 mm echogenic mass in the pericardial cavity near the left ventricle and atrium, accompanied by a large pericardial effusion shown in fig. A. Pericardiocentesis indicated haemorrhagic fluid. Cardiac MRI showed a well-defined mass measuring 93x70x45 mm, of pericardial haemangioma shown in figure B1,B2, confirmed with excision, histopathological of spindle cell variant haemangioma. Six months later, recurrence led to immunohistochemistry, revealing synovial cell sarcoma (TLE1, FLT1 positive). The patient was treated with ifosfamide and Doxorubicin but ultimately succumbed to systemic complications.

DISCUSSION

Pericardial synovial sarcoma (PSS) is a rare malignant tumor. The diagnosis of PSS in these unusual locations is challenging and requires additional diagnostic procedures such as immunohistochemistry, electron microscopy, and molecular genetic techniques for confirmation of the diagnosis[1] shown in fig. D. The case cardiac tamponade presented as the initial symptom, but no obvious evidence supported the diagnosis of pericardial synovial sarcoma. After 6 months, the anterior mediastinal tumor was found using transthoracic echocardiography.[2] Non-random occurrence of t(x;18) was consistently found in SS.

The survival rate of patients with primary cardiac sarcoma is poor, and most patients die within a few months after the diagnosis is confirmed. However, because of the rarity of PSS, it is difficult to determine the prognostic factors; however, diagnosis at a young age, lack of complicated chromosome abnormalities, and tumor originating from the pericardium appear to be factors pointing to good prognosis.[3]

CONCLUSION

This case highlights the diagnostic challenges of pericardial tumors, particularly when initial evaluations suggest benign haemangioma, later identification of synovial sarcoma emphasizes the necessity for thorough histopathological assessment and careful follow-up to improve patient outcomes shown in figure C

Figures:

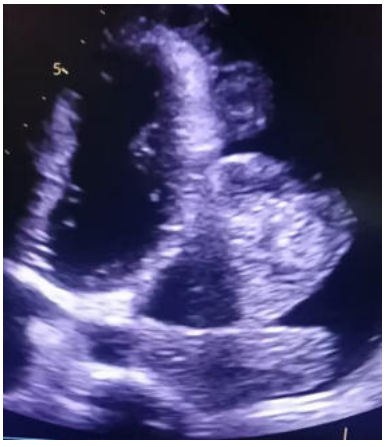


Figure: A. Echo showing in homogenous structure in pericardial space

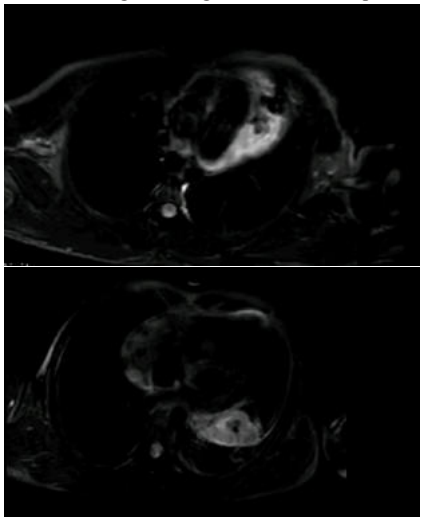
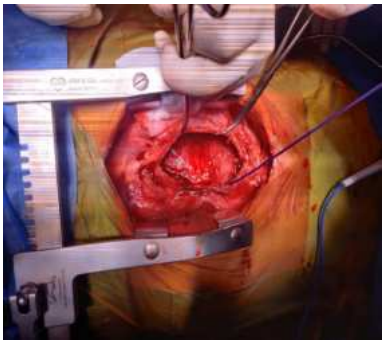
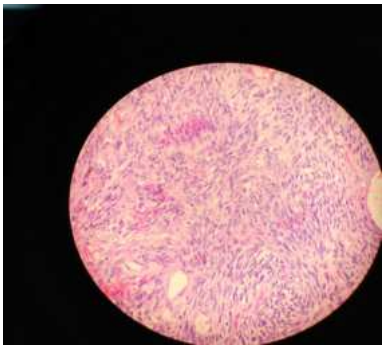


Figure B1: Iso to hyperintense in T1WI and homogenously hyperintense on T2WI and
Figure B2: STIR sequences with patchy areas of diffusion restriction suggestive of Pericardial hemangioma.



C. Photograph showing well encapsulated tumor with haemorrhagic necrosis.



D. HPE showing Spindle cell variant, initially diagnosed as hemangioma.

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