Left Atrial Myxoma: A Rare Case

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Abstract: Primary cardiac tumours are rare, having an autopsy incidence as 0.001% to 0.03%. 75% of these tumours are benign and nearly half of benign tumours are myxomas which frequently cause systemic problems. We present a case of left atrial myxoma in a 40 year female patient complaining of breathlessness and non-radiating gradually progressive chest pain since 6 months. The 2D-ECHO revealed pedunculated mobile homogenous mass arising from fossa ovalis and protruding into left atrium. The tumour was excised; the gross examination revealed a gelatinous mass which was diagnosed histologically as left atrial myxoma. We present this case in view of its rarity and to highlight the clinico-pathological features of cardiac myxomas.

Keywords: Myxoma, Left atrium

INTRODUCTION

Primary cardiac tumours are rare and account for about 0.3% of cardiac surgeries. Amongst these, 50% tumours are cardiac myxomas and are commonly seen in women in the age group of 30-60 years [1]. Cardiac myxomas are commonly located in the left atrium and present clinically with intra-cardiac obstruction, embolism or non-specific constitutional symptoms [2].

CASE REPORT

A 40 year old female presented with breathlessness and non-radiating, gradually progressive chest pain since 6 months. The patient had no past history of diabetes mellitus, hypertension or any other major illness.

Investigations

Hb and ESR: within normal limits.

2D-ECHO: Intra-cavitatory pedunculated mobile homogenous echogenic mass measuring 5.6 x 3.6 cm arising from fossa ovalis of inter-atrial septum protruding into left atrium without causing mitral stenosis.

The mass was excised with pedicle and sent for histopathological examination.

Histopathological Examination

Gross: Received a polypoidal friable gelatious whitish soft tissue mass measuring 5.5 X 4 X 2 cm. Cut section was grey-white gelatinous with multiple areas of haemorrhages (Fig. 1).

Fig. 1: Gross examination: A gelatinous polypoidal soft tissue mass

Microscopy revealed a polypoidal tumour covered by a single layer of flat endothelial cells enclosing stellate and polygonal cells with uniform nuclei set in a myxoid stroma. Stroma revealed areas of haemorrhages (Fig. 2).
The clinical features in our case were due to obstruction with no evidence of systemic symptoms or embolism.

**Diagnosis**

These tumours are diagnosed with echocardiography, MRI is required to rule out embolism.

Differential diagnosis of cardiac myxomas include organising thrombus, primary or metastatic sarcomas such as low-grade fibromyxoid sarcomas, inflammatory myofibroblastic tumour, myxoid leiomyosarcoma, angiosarcoma and rheumatic valve disease [2, 7].

**Histopathological features**

On gross examination, these tumours vary in diameter from 0.4-8 cm; are pale glistening gelatinous and can be polypoid or papillary. Polypoid lesions cause obstructive symptoms while papillary tumours present with embolic episodes. Microscopy reveals large stellate or spindle shaped cells separated by myxoid material [2, 7, 9]. Our case revealed a polypoid tumour and presented with obstructive symptoms. On immunohistochemistry, the tumour cells are positive for vimentin and CD 34 [1].

**Management**

The tumour should be excised promptly under direct vision with the aid of cardiopulmonary bypass [7].

**Prognosis**

The long term prognosis is excellent. Multiple lesions or familial myxomas are likely to relapse and require follow-up with serial echocardiography [1, 8].

**CONCLUSION**

- Primary cardiac tumours are rare, amongst which cardiac myxomas are most common and have uncertain histogenesis.
- Echocardiography is highly sensitive for pre-operative diagnosis.
- These tumours present with vague clinical symptoms, hence may be misdiagnosed clinically.
- Clinician should be aware of this rare tumour which is completely curable with surgical excision.

**REFERENCES**

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