Rapidly growing left atrial myxoma: a case report

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Abstract

Introduction: Left atrial myxomas are rare benign tumors of the heart. They vary widely in size, and very little is known about their growth rate. The reported growth rates of left atrial myxomas from several published case reports appear to vary from no growth, to between 1.3 to 6.9 mm/month in diameter within patients with established myxoma who have not undergone surgery.

Case presentation: We present the case of a rapidly growing pedunculated left atrial myxoma in a 62-year-old asymptomatic Caucasian woman found incidentally during routine transthoracic echocardiography. Our patient was attending her annual valve clinic assessment for moderate aortic regurgitation, and her two previous consecutive transthoracic echocardiography scans performed 12 and 24 months prior to this appointment had demonstrated a clear left atrium and aortic regurgitation of moderate severity.

Conclusions: To the best of our knowledge, our case is the first to provide images of absence and presence of myxoma from transthoracic echocardiography scans taken a year apart, with estimated growth rate of 2.2 mm/month. Rapidly growing myxoma may be mistaken for thrombus, and may require urgent surgical excision to reduce the risk of associated complications such as thrombo-embolic events, sudden cardiac death and removal of a possibly malignant tumor. The potential for rapid growth should be considered if there is a plan to delay surgery. Furthermore, it would be pertinent to consider annual echocardiography in patients presenting with clinical features suggestive of cardiac myxoma such as constitutional symptoms, as these tumors may be rapid growing and may only become apparent on subsequent echocardiography.
remained asymptomatic for two years after surgery, with no recurrence of myxoma on TTE.

Discussion
In the present report we describe a case of LA myxoma, with a rapid growth rate, found incidentally on routine TTE for assessment of AR. The latter was also discovered incidentally in the previous three years. Our case is unique as it is the first to present images of absence and presence of myxoma from TTE scans taken a year apart, with an estimated growth rate of 2.2 mm/month. The major differential diagnosis of myxoma is thrombus, which often has a rapid growth rate. Thus, caution is required in using rapid growth rate as a diagnostic criterion to differentiate between thrombus and myxoma. Myxomas may also resemble malignant tumors. A large atrial mass requires urgent surgical excision to reduce the risk of associated complications such as thrombo-embolic events, sudden cardiac death, and removal of possibly malignant tumor. The potential for rapid growth should be considered if there is a plan to delay surgery. Furthermore, it would be pertinent to consider annual echocardiography in patients presenting with clinical features suggestive of cardiac myxoma such as constitutional symptoms, as these tumors may be rapidly growing, and may only become apparent on subsequent echocardiography.

Conclusions
To the best of our knowledge, our case report is the first to present images of absence and presence of myxoma from TTE scans taken a year apart, with an estimated growth rate of 2.2 mm/month. The major differential diagnosis of myxoma is thrombus, which often has a rapid growth rate. Thus, caution is required in using rapid growth rate as a diagnostic criterion to differentiate between thrombus and myxoma. Myxomas may also resemble malignant tumors. A large atrial mass requires urgent surgical excision to reduce the risk of associated complications such as thrombo-embolic events, sudden cardiac death, and removal of possibly malignant tumor. The potential for rapid growth should be considered if there is a plan to delay surgery. Furthermore, it would be pertinent to consider annual echocardiography in patients presenting with clinical features suggestive of cardiac myxoma such as constitutional symptoms, as these tumors may be rapidly growing, and may only become apparent on subsequent echocardiography.

Consent
Written informed consent was obtained from the patient for publication of this case report and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.

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Authors’ contributions
AV was responsible for obtaining our patient’s history, her examination, for echocardiography data from our patient and writing the manuscript. HD was involved in writing and critical revision of the manuscript. All authors read and approved the final manuscript.

Competing interests
The authors declare that they have no competing interests.

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