Atrial myxoma is a benign tumour of the heart that occurs primarily in the left atrium. The clinical signs and symptoms may be nonspecific. The size of the lesion differs widely among patients but generally ranges from 2 to 6 cm. Depending on the size and location, it may cause mitral valve obstruction and pulmonary hypertension. We report a case of an unusually large left atrial myxoma in an 84-year-old woman that caused pulmonary hypertension and mitral valve obstruction.

Case report

The patient presented to our emergency outpatient clinic complaining of dyspnea and tachycardia of about 2 weeks' duration. She had had hypertension for 10 years. On physical examination, her blood pressure was 180/100 mm Hg and her heart rate was 116 beats/min. A pansystolic murmur grade 2/6 was heard in the tricuspid area. Pulmonary rales were present bilaterally on auscultation. The rest of the physical examination was unremarkable. On chest radiography, increased pulmonary vascularity and pulmonary edema were present.

With transthoracic echocardiography, a giant mass was seen, filling the entire left atrium, lying on the mitral valve and almost totally obstructing blood flow (Fig. 1). The mean pressure gradient through the mitral valve was 16 mm Hg with a maximum measurement of 24 mm Hg. Second-degree tricuspid insufficiency was present. Pulmonary arterial pressure was 84 mm Hg. Left atrial myxoma was the preliminary diagnosis. Coronary angiography revealed a patent vasculature.

At operation, we found a pedicled, smooth surfaced, giant mass filling the entire left atrium and originating from the fossa ovalis. It was removed together with its pedicle, leaving a defect of 0.5 × 1 cm on the interatrial septum, which was closed primarily. The excised mass was unusually large, measuring 9.6 × 8.2 × 6.8 cm (Fig. 2). Pathological examination of the excised mass revealed an atrial myxoma that consisted of mixed stromal tissue.

The patient was discharged from the hospital on postoperative day 7 without symptoms. Pulmonary arterial pressure was 38 mm Hg at the end of the first month. No recurrence was found with follow-up echocardiography undertaken after 6 months.

Discussion

Because the symptoms of atrial myxoma are frequently nonspecific, early diagnosis is difficult. Large myxomas may remain asymptomatic if tumour growth is very slow. Meng and colleagues reported a 4% rate of asymptomatic left atrial myxomas in a series of 149 cases. In patients with left atrial myxomas, symptoms of left-sided heart failure, such as dyspnea on exertion, may progress to orthopnea, paroxysmal nocturnal dyspnea or pulmonary edema because of obstruction at the mitral valve orifice. Dyspnea on...
exertion was the most prominent symptom in our patient. However, typical pulmonary edema was also present.

The causes of recurrent atrial myxomas are inadequate resection, multiple growth in different locations and seeding of tumour fragments during surgery. We recommend a total resection of the tumour stalk and its attachment, especially when the tumour originates from the fossa ovalis.\(^5\)

As seen in this case, atrial myxomas may develop into giant masses without producing any symptoms. Symptoms may develop late in the course of tumour development and may be vague or non-specific. In elderly patients presenting with dyspnea but no pulmonary disease, cardiac problems must be considered as the cause of pulmonary symptoms and complaints. Echocardiography is useful for detecting cardiac causes for dyspnea.

It is easy to detect such cardiac tumours via transthoracic echocardiography, which should be performed at the initial examination in all patients who complain of dyspnea.

The case we describe is one of the largest left atrial myxomas to have been reported in the literature. As the early surgical death rate is low and long-term results are good, cardiac myxoma should be removed as soon as a diagnosis is made.

Competing interests: None declared.

References


**FIG. 2.** The excised atrial myxoma, which measured 9.6 x 8.2 x 6.8 cm.