A thirty-two-year-old woman was admitted with complaints of fever, palpitations, and syncopal episodes for the last 3 months. On examination she was found to have elevated jugular venous pressure and pallor. Cardiovascular examination revealed loud first and second heart sounds with mid diastolic murmurs in mitral and tricuspid areas. ECG showed incomplete right bundle-branch block pattern. Transthoracic echocardiogram showed 4.5 × 4.6 cm size heterogenous intracardiac mass in right atrium (RA) attached to interatrial septum (Figure 1 and Movie I in the online-only Data Supplement). Two masses of similar echo texture were noted, 1 in the left atrium (LA; size 2.9 × 1.9 cms) attached to interatrial septum and another in left ventricular out flow tract (LVOT; size 0.9 × 1.4 cms) attached to interventricular septum (Figure 2 and Movie II in the online-only Data Supplement) causing mild LVOT obstruction (Doppler peak gradient of 21 mmHg; Figure 3). The atrial masses were prolapsing into the ventricles during diastole, obstructing the tricuspid and mitral orifices. The patient was managed surgically. Intraoperatively a large mass in RA protruding into the right ventricle body and outflow tract (Figure 4), was noted and another mass measuring 1 × 0.8 cms was noted in the right ventricle in between the trabeculae. All the intracardiac masses were excised, and the patient had uneventful recovery. Postoperative echocardiography did not show any residual masses in
the cardiac chambers (Figure 5) or gradient across LVOT (Figure 6). Histopathologic examination of all the 4 masses showed abundant mucoid stroma with interspersed scattered cells, spindle to stellate shape with oval nuclei. All these features are diagnostic of cardiac myxoma (Figure 7). Echocardiographic examination of the patient’s children, sisters, and parents did not show any cardiac masses.

Cardiac myxomas are the commonest primary cardiac tumours. They are infrequently multiple and rarely multifocal. The usual site of occurrence of myxomas is LA (75%), RA (15% to 20%), and left and right ventricle (3% to 4% each).1 Multiple myxomas and rare locations are more common in familial disease.2 Sporadic 4 myxomas arising in all the 4 cardiac chambers have been rarely reported.

Figure 5. Transthoracic echocardiogram in apical 4-chamber view showing no residual cardiac masses after surgery. LA indicates left atrium; LV, left ventricle; RA, right atrium; and RV, right ventricle.

Figure 6. Transthoracic echo Doppler study showing no gradient across left ventricular outflow tract (LVOT) after surgery.

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Figure 7. A and B, The photomicrograph showing round to polygonal and stellate cells surrounded by loose myxoid stroma (H&E-stained; magnification, ×100).

Disclosures

None.

References

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