A 27-year old female with a systolic ejection murmur was referred to our cardiovascular imaging unit for further examination. Patient denied any complaints of symptoms. An electrocardiogram showed a first-degree atrioventricular block. Her chest roentgenogram revealed pulmonary artery dilatation with no cardiomegaly. Transthoracic echocardiographic images showed a diffusely thickened left atrium. The abnormal thickening was continuously seen in the pulmonary venous wall, which caused pulmonary vein stenosis (Figure 1). Peak pulmonary venous flow velocity was 2.13 m/sec. Estimated pulmonary artery pressure was 41 mmHg. There was no apparent left ventricular wall motion abnormality. The apical four chamber view revealed a thickened right atrial wall as well as left atrial wall. The transesophageal echocardiographic images showed a smooth, thickened atrial wall with no extension of the mass to the epicardial side (Figure 2). Full body magnetic resonance image did not show pathological lymph node swelling. Ga (Gallium) scintigraphy revealed significant abnormal uptake in the heart. Angiography revealed a feeding artery from the left circumflex artery to the tumor. Biopsy specimens from the right atrium and atrial septum showed Lymphoma cells (B-cell type). The patient was thus diagnosed with primary cardiac B-cell lymphoma.

Primary cardiac lymphoma, defined as a lymphoma...
involving only the heart and pericardium, is rare and generally asymptomatic. The diagnosis is often delayed with resultant poor prognosis. In the present case, cardiac B-cell lymphoma appeared as diffusely thickened atria, which was found by routine echocardiographic examination. Primary cardiac lymphoma commonly appears as mass formation and rarely appears as a hypertrophic ventricular wall [1]. There has been only one case report of primary cardiac lymphoma with diffusely thickened atria [2], and to our knowledge, this is the second case of cardiac lymphoma with a hypertrophic atrial wall.

References