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Images in Cardiology: A Case of Tamponade Complicating Pregnancy

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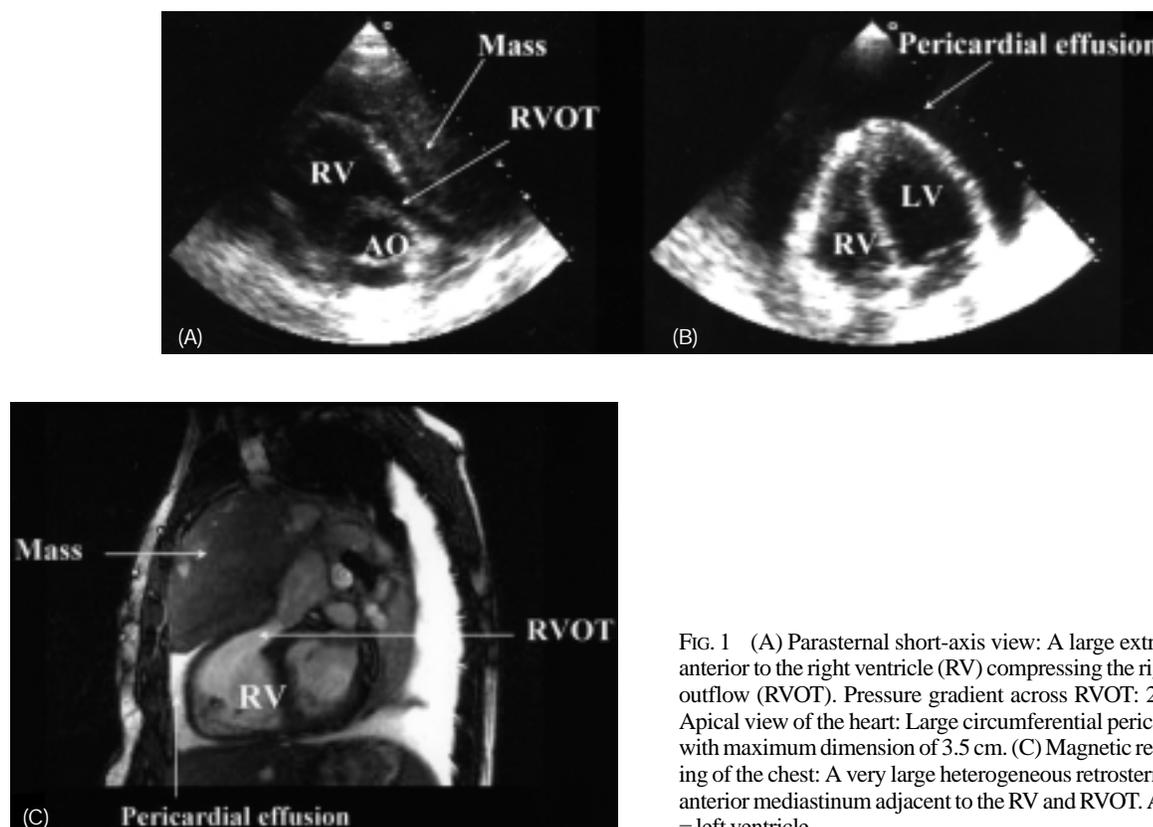


FIG. 1 (A) Parasternal short-axis view: A large extracardiac mass anterior to the right ventricle (RV) compressing the right ventricular outflow (RVOT). Pressure gradient across RVOT: 21 mmHg. (B) Apical view of the heart: Large circumferential pericardial effusion with maximum dimension of 3.5 cm. (C) Magnetic resonance imaging of the chest: A very large heterogeneous retrosternal mass in the anterior mediastinum adjacent to the RV and RVOT. AO = aorta, LV = left ventricle.

A woman 25 weeks pregnant was transferred to our institution for emergent evaluation of dyspnea and near syncope. Referral transesophageal echocardiography (TEE) was interpreted as pulmonic stenosis. Physical examination revealed a tachypneic woman in moderate respiratory distress; her blood pressure was 112/82, heart rate 112 sinus tachycardia. Cardiac examination demonstrated 10 cm jugular venous distension diminished heart sounds without murmur or knock. Repeat TEE in our facility (Figs. 1A and B) showed a large pericardial effusion, raising a question of mass with extensive compression of the right ventricular outflow tract (RVOT) and Doppler evidence of systolic pulmonary hypertension of 50 mmHg.

Emergent magnetic resonance imaging (MRI) confirmed the presence of a 15 cm wide \times 15 cm cephalocaudal \times 9 cm anterior-posterior mediastinal mass (Fig. 1C). Computed tomography-guided pericardial drainage produced 500 ml of a bright serosanguinous fluid. Cytology later revealed a diffuse large B-cell lymphoma subtype E.

This was a rare case of malignant tamponade presenting as acute pulmonic stenosis. The initial TEE interpretation failed to note an extrinsic mass compression of the RVOT. Chemotherapy began on an emergent basis. The remainder of hospital course was uneventful. The patient delivered a normal baby boy. Both are reportedly doing well after 3 months.