A Right Thrombus Mimicking Cardiac Tumor After Atrial Septal Defect Closure Operation

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Figure 1. Echocardiographic view of the right atrial lesion of 1.0x1.5 cm dimensions.



Figure 2. Intraoperative view of the right atrial mass located at the sutured rim of the former ASD.

A 9-year-old girl was admitted to the hospital because of secundum atrial septal defect (ASD) diagnosed at investigation of her cardiac murmur. She had sinus rhythm with an average ventricular rate of 90 beat/min. A transthoracic echocardiography (TTE) examination revealed the presence of secundum ASD (1x1.5 cm) and her pulmonary artery pressure (22 mm Hg) was within normal ranges. The surgical procedure including primary closure of ASD was performed under cardiopulmonary bypass with mild hypothermia (34° C).

One year later, control TTE showed a thin stemmed solitary lesion located in the right atrium of 1x1.5 cm in dimensions (Figure 1). She did not experience an embolism after the first operation. At the second operation, a large, cardiac tumor conjectured mass with smooth surface was adherent to the sutured rim of the atrial septum (Figure 2). The solitary lesion of the right atrium was resected from the rim of closed ASD. The pathological examination revealed organized thrombus consisting of fibrin polymers and blood cells. Postoperative course was uneventful. She did not receive anticoagulation regimen, but was given an antiaggregant therapy after the redo operation. Transthoracic echocardiography confirmed that thrombosis no longer existed in the heart chambers.

This case is of particular interest for the mimicking cardiac tumors and difficulty of the differential diagnosis because of the rarity of this thrombogenic occurrence after ASD closure.