A giant pseudoaneurysm of the sinus of Valsalva with pulmonary artery obstruction

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A 20-year old woman with progressive dyspnoea was admitted to the hospital. Computerized tomography (Fig. 1) and invasive angiography (Fig. 2A–C) demonstrated a giant aneurysm of the sinus of Valsalva with pulmonary artery obstruction, which was confirmed intra-operatively (Fig. 2D). Histopathology suggested the perforation of the sinus of Valsalva.

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Figure 1: A contrast computed tomography scan showed a giant aneurysm (5 × 7 cm) with thrombus arising from the right coronary sinus (A and B). Pulmonary artery was obstructed by the aneurysm (arrow heads, C and D). V: superior vena cava; A: aorta; PA: pulmonary artery; M: aneurysm.

Figure 2: An aortogram revealed a giant aneurysm (arrow heads) arising from the aortic root. There was extremely slow contrast filling and washout of the giant aneurysm (A and B). A right ventricular angiogram demonstrated obstruction at the main pulmonary artery (C). Emergent surgery was performed because of the patient's severe condition. After opening the pericardium, a giant aneurysm with dark violet irregular surface became visible (D). The aneurysm was incised and the sinus of Valsalva was repaired by the Yacouby procedure. The post-operative course was uneventful. A: aneurysm; RV: right ventricle.