

中文題目：年輕男性以急性心衰竭呈現之主動脈竇瘤破裂併右心房瘻管

英文題目：Ruptured of sinus valsalva aneurysm with fistula to the right atrium presented with acute heart failure in young male

作者：蘇奕嘉¹，黃成偉²

服務單位：成大醫院內科部¹ 成大醫院內科部心臟科²

Case report:

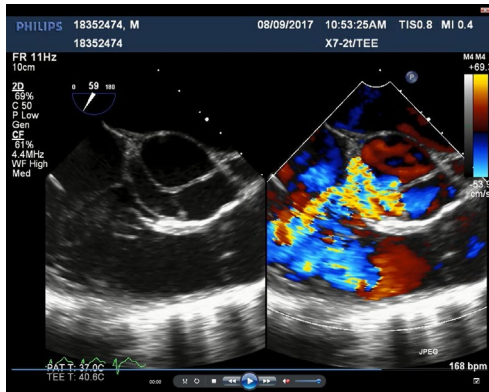
A 26-year-old male denied any underlying disease. He presented with sudden onset of chest pain and dyspnea after work. Accompanied symptoms included fatigue, general discomfort and palpitation. According to his statement, he only had common cold and some upper respiratory symptoms 2 weeks earlier, and denied any contact history. Profound shock and respiratory were presented while arriving ER. EKG revealed whole anterolateral lead ST segment depression. CXR showed bilateral cephalization and pulmonary edema. Laboratory showed lactic acidosis with elevation of troponin-T, CKMB. Cardiac catheterization reported normal coronary artery with extremely low diastolic pressure. Aortoangiography showed severe AR with another shunt into right atrium. CTA showed negative evidence of aortic dissection. Transesophageal echocardiogram (TEE) disclosed a continuous flow from RCC (right coronary cusp) to RV, compatible with sinus valsalva rupture. He then underwent emergent surgery for sinus of valsalva aneurysm repairment. A "windsock" fistula diameter size 1cm, length 3cm in RA, protruding to RV through tricuspid valve was found, and no pathologic change of aortic valve. After surgical intervention, his vital sign stabilized and absent of valvular dysfunction. Thus he was discharged and follow up at OPD regularly.

On the follow up, echocardiogram reported stationary LV ejection fraction, no aortic regurgitation. The patient had fully recovered his baseline ADL.

Conclusion:

Sinus valsalva aneurysm (SVA) is a rare cardiac abnormality which may either congenitally or acquired. The aneurysms are more prevalent in males and people from Asian descent. Symptoms associated with ruptured are dyspnea, chest pain and fatigue. The key of management of ruptured SVA is early diagnosis. Echocardiogram, especially TEE allows accurate evaluation of the origin of sinus, size of aneurysm, the presence of left-to-right shunt and other cardiac lesion. The treatment of choice is early surgical intervention, the ten-year survival rate after surgical repair of a ruptured SVA is 90%.

Picture 1. TEE revealed a continuous flow from RCC (right coronary cusp) to RV (Right ventricle), passed through RA (Right atrium)



Picture 2. A “windsock” fistula diameter size 1cm, length 3cm in RA, protruding to RV through tricuspid valve was found, and no pathologic change of aortic valve.

