

**PP32 RUPTURED SINUS OF
VALSALVA ANEURYSM (SOVA) – A
CASE REPORT**

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Introduction:

Sinus of Valsalva aneurysm (SOVA) is defined as rare defects of the aortic root located between the aortic valve annulus and sinotubular junction, caused by aortic wall weakness, which has potential for spontaneous rupture. Ruptured SOVA can present as a clinical emergency because of formation of aortic-cardiac shunting, which can rapidly affect the hemodynamic status. An early transthoracic echocardiography (TTE) and/or transoesophageal echocardiography (TEE) may aid in early detection of such catastrophic illness.

Case Description:

29-year-old lady with no known medical illness brought to emergency department with complaints of chest discomfort, palpitation and shortness of breath started 3 hours prior to her presentation. Otherwise, she had been unwell for 5 days with cough for 5 days and feverish for 2 days. Upon assessment, she was tachycardic with heart rate of 130bpm and blood pressure of 125/53mmHg. On auscultation, the team able to appreciate continuous murmur at the 3rd parasternal left intercostal space. While being observed in ED, she became more restless and was subsequently intubated. Electrocardiogram (ECG) done showed

sinus tachycardia with ST-elevation in leads II and aVF; ST-depression in leads V4-V6. Bedside transthoracic echocardiography done shows suspicious turbulent flow located at the aortic root into right ventricle, thus proceeded for TEE and showed evidence of ruptured SOVA. She was then stabilized and immediately referred to cardiothoracic center.

Discussion:

Although its rare, ruptured SOVA remain one of true emergency presentation in emergency department. A high index of suspicion in emergency for any patient with chest pain and continuous murmur is important. Early diagnosis of ruptured SOVA with TTE and/ or TEE and emergent surgical repair can provide good immediate and 1-year outcomes.

Conclusion:

SOVA is a relatively rare disorder. Presentation can range from asymptomatic continuous murmur to a fatal cardiogenic shock. TTE plays an important role in the diagnosis of ruptured SOVA.

Keywords:

Sinus of Valsalva aneurysm, rupture, echocardiography