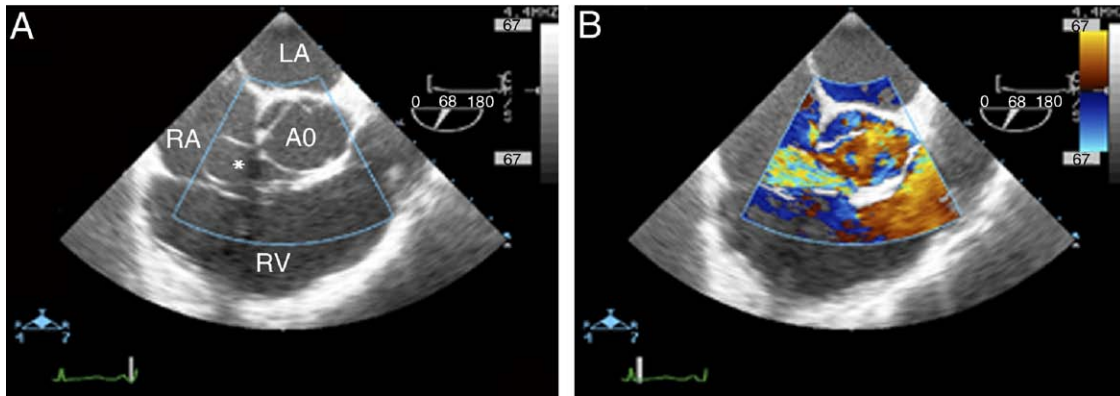


IMAGES IN CARDIOLOGY

A Rare and Difficult Diagnosis

A Ruptured Sinus of Valsalva Aneurysm

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A 34-year-old woman was admitted to the intensive care unit because of respiratory failure, hypotension, and tachycardia. Examination revealed increased jugular venous pressure and a rough systolic murmur loudest over the fourth left intercostal space. A chest X-ray showed pleural effusion. Echocardiography suggested endocarditis with possible malformation of the septal leaflet of the tricuspid valve with regurgitation. However, a localized aneurysm originating from the aorta into the right atrium was also noted (**A**, [Online Video 1](#)) showing turbulent flow from the aorta into the aneurysm (**B**, [Online Video 2](#)). A sinus of Valsalva rupture was considered and pre-operatively confirmed, with a fistula from the aorta to the right atrium. This case illustrates that in the case of a rare combination of findings, namely signs of double-sided heart failure and possible malformation of the tricuspid valve together with a turbulent flow in the proximity of the aortic root, a sinus of Valsalva rupture should be considered.