

ANSWER

Although the patient had cor-triatratrium sinister, it was not the cause of pedal edema in this patient. A cor-triatratrium would produce pedal edema if it is causing significant obstruction to blood flow resulting in significant pulmonary venous and arterial hypertension, leading to right heart failure. In this patient, the communication through the left atrial membrane was rather large with hardly any flow turbulence (1st slide, right image). The mean gradient across this membrane was 4 mmHg at a heart rate of 104 beats/min. More importantly, there was no right heart dilatation which was very unlike of right heart failure secondary to left heart pathology.

A careful look at the images will show that there is prominent ventricular septal bounce (easily appreciable in slide 2) with circumferential pericardial thickening. Lateral wall of the left ventricle is almost tethered to the thickened pericardium. These findings are strongly suggestive of constrictive pericarditis, which indeed was the cause of pedal edema in this patient. The patient had prominent respiratory variation in mitral (Figure 1 below) and tricuspid inflow velocities, annulus paradoxus (Figure 2) and annulus reversus. His inferior vena cava was fully dilated and non-collapsing. Computed tomography of chest revealed minimal pericardial effusion with circumferential pericardial thickening as well as multiple large mediastinal lymph nodes (suggestive of tubercular etiology) (Figure 3).

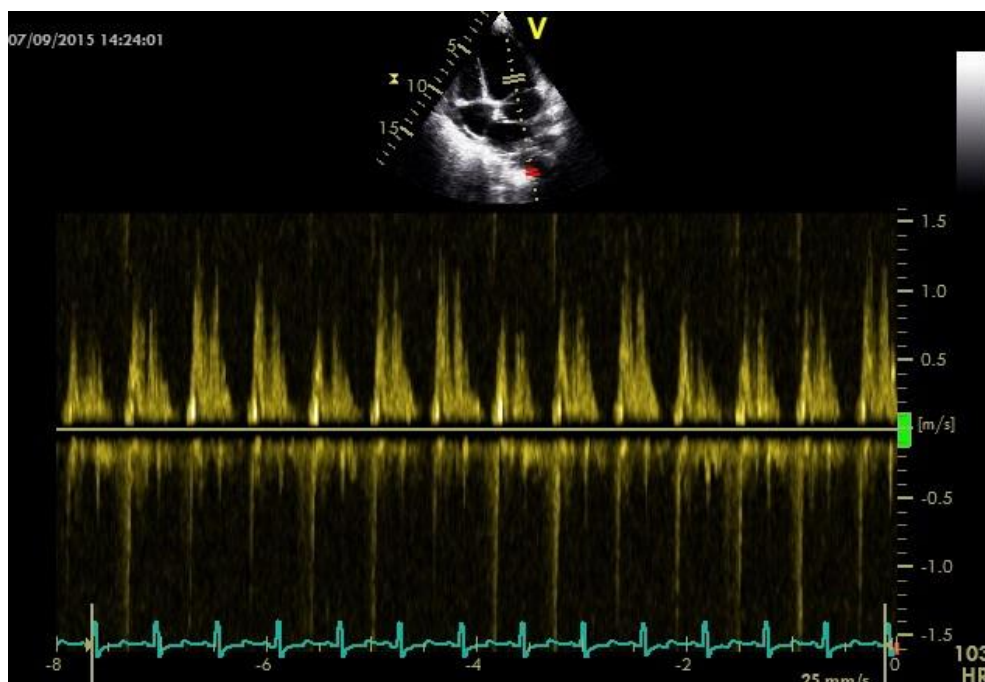


Figure 1

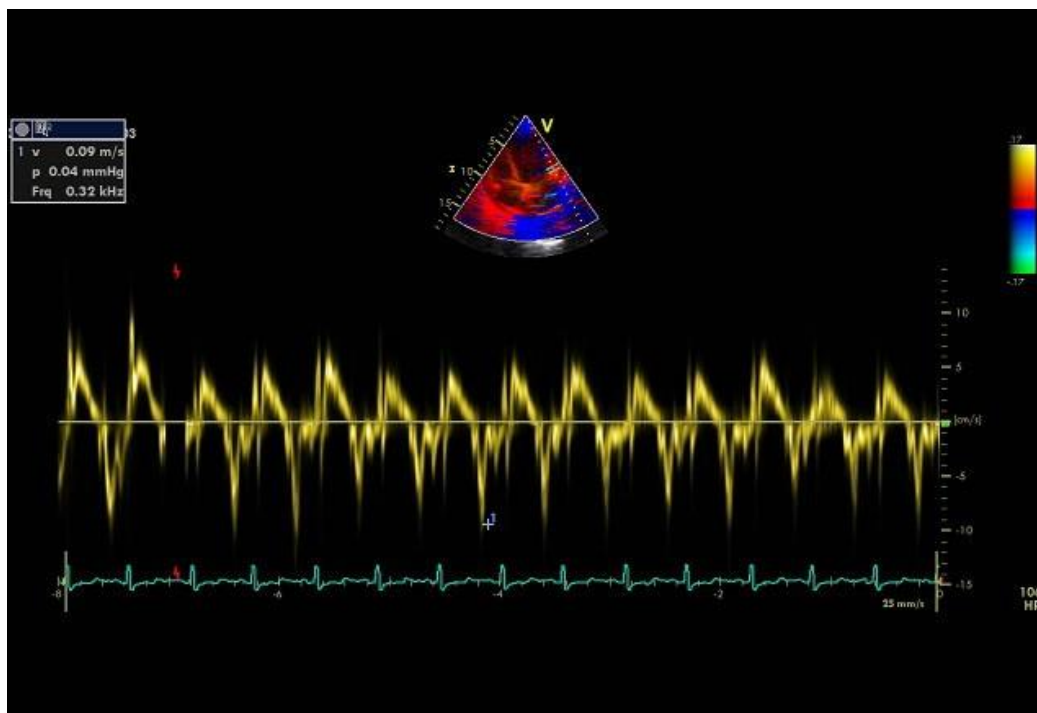


Figure 2

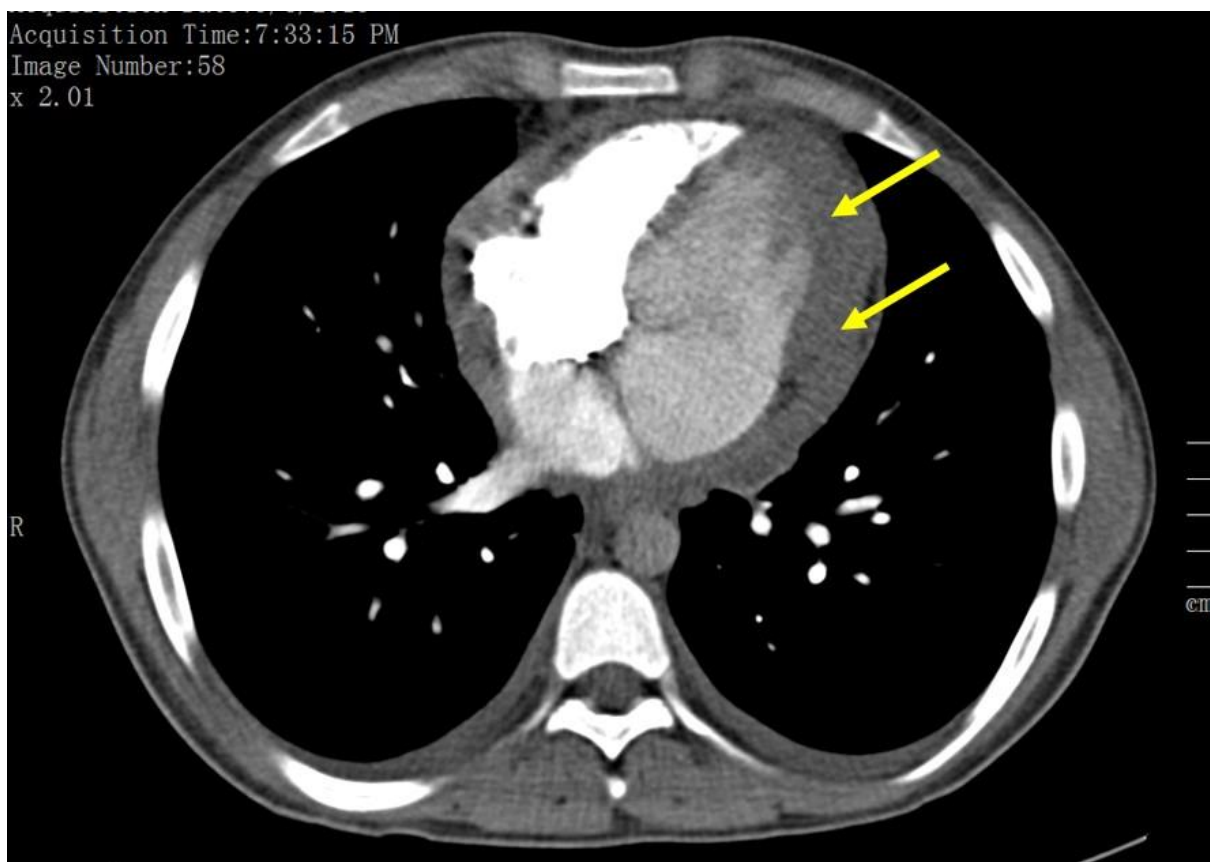


Figure 3