

Title: A CASE OF REFRACTORY ASCITIES IN A PATIENT WITH ABSENT PERICARDIUM

Authors: Aneliya San, MD, Nina Rizk, MD, MPH, MS

Background: Congenital absence of the pericardium is a rare cardiac disorder, often undetected and asymptomatic. However, at times manifesting as mechanical impairment of cardiac function.

Case: 44-year-old male with prior gallstone pancreatitis and portal vein thrombosis, presented with refractory ascites, hypotension, and tachycardia. Evaluation with ECG revealed low voltage recording and right axis deviation. TTE showed probable external compression of RA and RV. Chest CT and TEE demonstrated leftward and posterior displacement of the heart, absence of the pericardium, parachute-like mitral valve with mitral valve prolapse and external diaphragmatic compression of the right atrium, right ventricle, and tricuspid annulus by ascites.

Discussion: Given the diagnostic findings, it was deemed that compression of the RA by ascites in the setting of absent pericardium is resulting in increased gradients across the tricuspid valve, causing higher right atrial pressures and worsening ascites. TIPS procedure to address the portal vein thrombosis was recommended through multidisciplinary discussion. Diuresis and frequent paracenteses were suggested in the interim. The patient opted for outpatient management and was discharged home.

Conclusion: Rare anatomical anomaly resulted in increased predisposition to symptoms due to extrinsic compression of the right heart. This case highlights the interplay between clinical findings, multimodal diagnostic imaging, and cardiac hemodynamics.

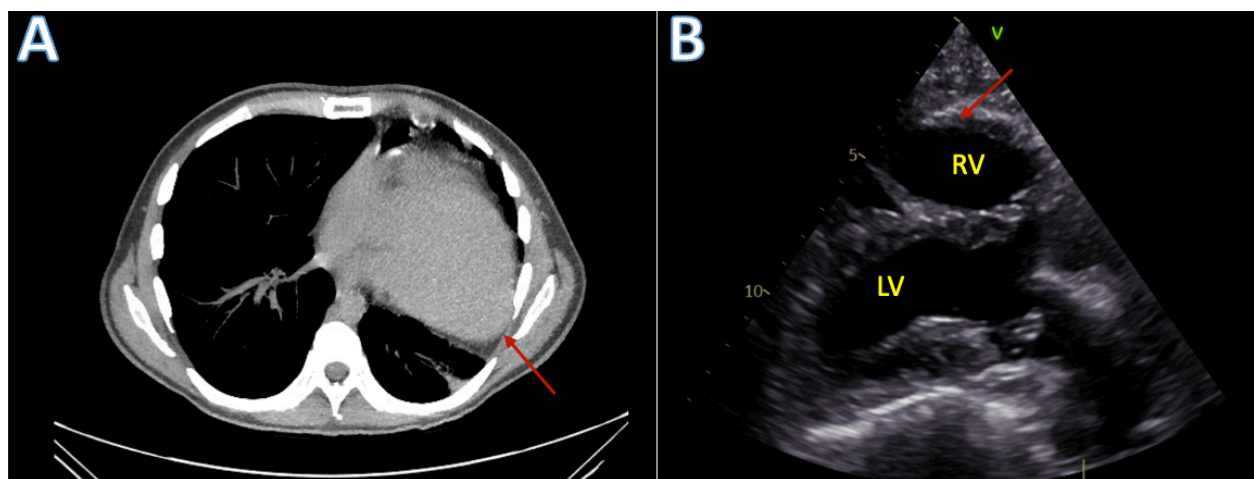


Figure 1: A - Chest CT demonstrating leftward cardiac displacement and absence of pericardium (red arrow).
B - TTE parasternal axis demonstrating external compression of RV (red arrow) and visible pericardium.