Clinical Images and Case Reports Journal

Clinical Image | Vol 5 Iss 2

Like a Trapped Mouse: A Catastrophic Massive Right Atrial Mass in Post Cardiac Arrest Patient

Ebubechukwu Ezeh, Maddie Perdoncin*, Shaden Daloub, Kelechukwu Okoro, Mehiar El-Hamdani and Ahmed Amro

Department of Internal Medicine, Marshall University Joan C. Edwards School of Medicine, Huntington, West Virginia, USA

***Corresponding author:** Maddie Perdoncin, Department of Internal Medicine, Marshall University Joan C. Edwards School of Medicine, Huntington, West Virginia, USA. E-mail: perdoncin@marshall.edu

Received: January 19, 2023; **Accepted:** January 28, 2023; **Published:** February 15, 2023

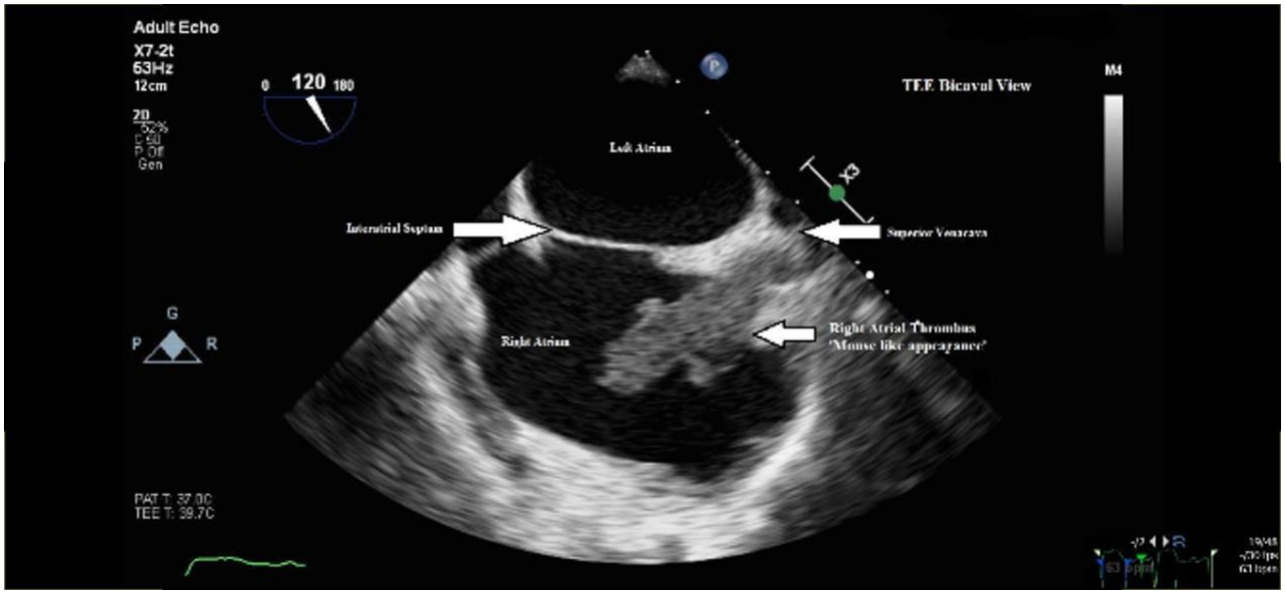

Figure 1: Transesophageal echocardiogram (TEE, bicaval view) showing a large echogenic mobile mass measuring 5X2 cm protruding from SVCS and looking like a "trapped mouse".

Clinical Image

A 58-year-old female was transferred from a long-term acute care facility to our hospital for placement of a feeding tube and tunneled venous dialysis catheter. Past medical history was notable for atrial fibrillation treated with oral anticoagulation, deep venous thrombosis, end- stage renal disease on hemodialysis via tunneled catheter, coronary artery disease, and heart failure with preserved ejection fraction. Soon after arrival, the patient developed cardiac arrest with pulseless electrical activity (PEA) for which she was coded. Return of spontaneous circulation was achieved after 2 minutes.

She was transferred to the intensive care unit (ICU) for close monitoring and management. In the ICU, blood culture drawn from her tunneled venous dialysis catheter was found to be positive for vancomycin-resistant enterococcus (VRE) and she was started on Daptomycin. The catheter was removed after 2 days. A transthoracic echocardiogram (TTE) demonstrated normal global systolic left ventricular function with a large echogenic pedunculated mobile mass on the right side of the intra-atrial septum. Follow-up TEE demonstrated a large echogenic mobile mass measuring 5.0-centimeters (cm) by 2.0cm protruding from the superior vena cava representing a large thrombus (Figure 1). Computed tomography showed pulmonary embolism which was presumed to have originated from the RA thrombus. Due to the patient's morbidity, the family decided against thrombectomy or thrombus extraction with angiovac, and the patient was discharged to hospice care.

The incidence of RA thrombi is not well documented as most cases go undetected. Diagnosis is made when patients develop symptoms or present with embolization to the lungs [1,2]. Management of RA thrombus is accomplished through several modalities including anticoagulation, thrombolysis, surgical thrombectomy, and percutaneous aspiration thrombectomy [2-4]. There is no clear consensus on the type of treatment. Treatment varies on patient stability, clot burden, and overall risk. Our case highlights the differential diagnosis for right atrial masses and emphasizes the critical role of echocardiogram in the accurate diagnosis of RA masses. Early diagnosis facilitates timely institution of management. Sometimes, RA thrombus may predispose to a fatal pulmonary embolism like in our patient.

REFERENCES

1. Benjamin M, Afzal A, Chamogeorgakis T, et al. Right Atrial Thrombus and its Causes, Complications, and Therapy. Baylor Univ Med Cent Proc. 2017; 30: 54-56.
2. Suratkal V, Ahmed A. Right Atrial Thrombus and Challenges in its Management. J Assoc Physicians India. 2018; 66: 65-68.
3. Bhargava M, Dincer E. Traveling Thrombus in the Right Atrium: Is It the Final Destination? Case Rep Pulmonol. 2012; 1-3.
4. Khalilova S, Mammadova S, Rustamzade F. Free Floating Thrombus in Right Heart Associated with Pulmonary Embolism: The Effect of Streptokinase. Azerbaijan Med Assoc J. 2016; 1: 41.