Austin Critical Care Journal

Open Access

Austin Publishing Group

Clinical Image

# Right Ventricular Thrombus in a Critically Ill Cancer Patient

**Silvio A. Ñamendys-Silva*, Juan M. Arredondo-Armenta, Francisco J. García-Guillén and Humberto Guevara-García**

Department of Critical Care Medicine, National Cancer Institute, Mexico

***Corresponding author:** Silvio A. Ñamendys-Silva, Department of Critical Care Medicine, National Cancer Institute, México. Av. San Fernando No. 22, Col. Sección XVI, Delegación Tlalpan, 14080, México City, Mexico, Tel: +52 55 47471020, ext. 13015, 13016; Email: snamendys@incan.edu.mx

**Received:** April 29, 2015; **Accepted:** May 06, 2015; **Published:** May 07, 2015

## Keywords

Right ventricular; Thrombus; Pulmonary embolism, Cancer patients; Critically ill patients; Computed tomography

## Right Ventricular Thrombus in a Critically Ill Cancer Patient

A 35-year-old woman with medical history of metastatic triple negative breast cancer was evaluated in our intensive care unit for cough and dyspnea. On physical examination, she was afebrile; the blood pressure was 100/60 mm Hg, the pulse rate was 120/min, the respiratory rate was 32/min. Oxygen saturation with the patient breathing room air, was 90%, and 93% with the patient breathing oxygen, 5 L/min by nasal cannulas. The heart sounds were normal without any added sounds or murmurs. Examination of the respiratory system was unremarkable. Her abdomen is soft, non-distended, and non-tender, but with evidence of hepatomegaly. An electrocardiogram showed normal sinus rhythm with negative T waves in V1, V2, V3, and V4 leads. Complete blood count on admission revealed leukocytosis and thrombocytopenia. Computed Tomography (CT) scans showed: left image obtained before injection of contrast medium showing a spontaneous high-density mass in right ventricle. Right image scan obtained during contrast material infusion shows a large right ventricular filling defect extending into the pulmonary arterial trunk. The patient was diagnosed with Acute Pulmonary Embolism (APE) ( Figure 1) .

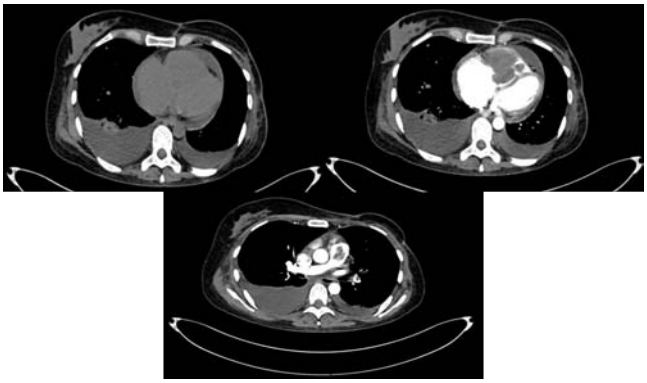

**Figure 1:** Computed tomography scans.

Right Ventricular Thrombus (RVT) is an uncommon complication in patients with APE. The prevalence of RVT is approximately 4% [1]. RVT is usually found in critically ill patients with APE and hemodynamic instability [1]. The CT has allowed distinguish the ventricular wall from the thrombus, because the myocardium takes up contrast material, while the thrombus remains unspecified between the wall and the contrast-material filled ventricular cavity [2].

## References

1. Torbicki A, Galié N, Covezzoli A, Rossi E, De Rosa M, Goldhaber SZ. Right heart thrombi in pulmonary embolism: results from the International Cooperative Pulmonary Embolism Registry. J Am Coll Cardiol. 2003; 41: 2245-2251.
2. Godwin JD, Herfkens RJ, Skiöldebrand CG, Brundage BH, Schiller NB, Lipton MJ. Detection of intraventricular thrombi by computed tomography. Radiology. 1981; 138: 717-721.




**Citation:** Ñamendys-Silva SA, Arredondo-Armenta JM, García-Guillén FJ and Guevara-García H. Right Ventricular Thrombus in a Critically Ill Cancer Patient. Austin Crit Care J. 2015;2(1): 1007.