A 50 year-old female presented to our hospital with symptoms suggestive of pulmonary embolism (PE). Ten days before her presentation, a huge free-floating mass with a smooth surface which prolapsed into the right ventricle in every diastole, was obtained in the right atrium (RA) by transthoracic echocardiography (TTE) in another center (Figure 1). There was no RA mass in TTE and transeosophageal echocardiography (TEE) images. Bilateral lower limb venous Duplex examination was unremarkable. We suggested that RA mass was a thrombus which had totally embolized to right pulmonary artery. A big thrombus image in the right main pulmonary artery and large infarct areas in the medial and inferior lobes of the right lung were demonstrated in the chest computed tomography (CT) (Figure 2, 3).

Analyses of thrombotic markers showed factor V Leiden mutation (G1691A), positive in the heterozygous state, accompanying protein C deficiency with an activity of 54%. Due to hemodynamic instability, the case was regarded as high risk and thrombolytic therapy (50 mg tissue plasminogen activator) within two hours was administered. Three days after, no...
change was observed in both the infarct size and thrombus image in the right pulmonary artery in the CT scan. In the follow-up period, we observed significant improvement in her clinical status, under effective oral anticoagulation therapy. Control chest CT scans showed progressive resolution of the thrombus and marked decrease in the infarct size. At the end of 10 months, thrombus seemed to be totally removed from the pulmonary artery.

Right heart thrombus is a rare form of thromboembolic disease, associated with high risk of PE. Our case is an example of total embolization of RA thrombus in a hypercoagulable state.