## An extremely enlarged heart from a mitral valve stenosis patient

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A 66-year-old woman was admitted to the hospital because of lower gastrointestinal bleeding and heart failure. Ten years before this admission, the patient was diagnosed with rheumatic heart disease and mitral valve stenosis. Nine years before, she underwent mechanical mitral valve replacement. Since then, she had been taking furosemide 20 mg qd, spironolactone 25mg bid, digoxin 0.125 mg qd, and warfarin 1.875–3.125 mg to maintain international normalized ratio (INR) in target range. She also took metoprolol and perindopril inconsistently. The patient had been hospitalized several times due to gastrointestinal bleeding episodes within the last 2 years with two times unstable hemodynamics history and every time became stable attributed to suspending anticoagulant therapy, blood transfusion and other supportive treatments. Upon this

arrival, the patient was dyspneic, and her blood pressure was 85/46 mmHg. A blood count showed hemoglobin 6.8 g/dL. Computed tomography performed with intravenous contrast revealed significantly distended left atrium (LA) and left ventricle (LV) (Figure 1A). Transthoracic echocardiography demonstrated a functional mechanical mitral valve, markedly hypertrophic LA, LV and right atrium (RA), mild aortic regurgitation, mild tricuspid regurgitation, moderate pulmonary hypertension, and ejection fraction (EF) of 31% (Figure 1B).

Patients with mechanical mitral valve require the permanent use of anticoagulants, such as warfarin, to prevent thromboembolic events. Given the extremely enlarged heart and history of several short-term warfarin discontinuations, bleeding events, and blood transfusion, it is to our surprise that thromboembolism had never been evident on this patient.

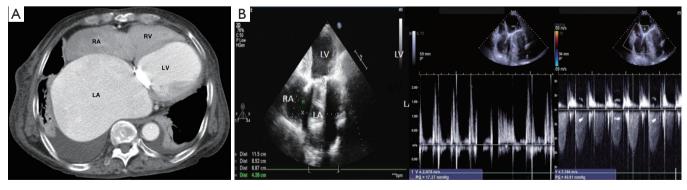


Figure 1 An extremely enlarged heart. (A) Computed tomography; (B) transthoracic echocardiography. RA, right atrium; RV, right ventricle; LA, left atrium; LV, left ventricle.

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#### **Footnote**

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to the accuracy or integrity of any part of the work are appropriately investigated and resolved. Written informed consent was obtained from the patient for publication of this study.

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