A 75-year-old male with liver cirrhosis and hepatic tumour on ultrasound was referred to echocardiographic laboratory because of the symptoms of right heart failure. The patient’s general condition has deteriorated gradually and lower limb oedema and ascites have been present for a few weeks. The echocardiographic study revealed a large right atrial mass (of approximately 52 × 30 mm² dimension), protruding from dilated inferior vena cava (IVC) and producing minimal obstruction of IVC inflow. No other cardiac pathology was present. The plasma D-dimer level was normal. Tentative anticoagulation with acenocoumarol was initiated, but after 2 months it was discontinued due to concomitant thrombocytopenia. The patient’s general condition and symptoms, however, improved substantially. Unexpectedly, the follow-up echocardiographic study demonstrated no right atrial mass, providing strong evidence for thrombotic composition of the lesion and excluding its metastatic origin (Panels A–F). The report demonstrates the difficulties in differential diagnosis of intracardiac masses and the spectacular response of a large lesion to medical therapy.

Panel A. Echocardiographic apical four-chamber view showing a large right atrial mass.
Panel B. Irregular shape of right atrial lesion seen in modified parasternal long axis view.
Panel C. Echocardiographic image from subcostal view showing dilated IVC (arrows) with intraluminal mass protruding into the right atrium.
Panel D. Colour Doppler image from subcostal view showing turbulent IVC inflow into the right atrium.
Panel E. Mild IVC obstruction demonstrated by continuous Doppler echocardiography from subcostal view.
Panel F. Normal heart at follow-up echocardiographic study.