A 64-year-old man with chronic liver disease presented with dyspnoea, and a chest contrast computed tomography (CT) was performed to evaluate the suspect of pulmonary embolism (Panel A).

A mass occupying the right atrium, of the same density of the myocardium at early-phase scan, was diagnosed as thrombus by CT findings. Echocardiography (Panel B) was performed with a continuous infusion of contrast and flash-replenishment assessment to dynamically evaluate whether the mass was filled by microbubbles (an intravascular tracer), vascularization raising the possibility of malignancy.

The mass filled with contrast at a similar rate compared with the myocardium (Panel C, lower panel, Supplementary material online, Video S1) confirming vascularization.

[18F]FDG positron emission tomography showed hyperaccumulation of the radioactive marker in the right atrium and liver (Panels C and D), confirming the malignancy. The general conditions quickly worsened and the patient died. The autopsy confirmed liver lesions and the mass was filled by microbubbles (an intravascular tracer), vascularization raising the possibility of malignancy.

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Contrast-echocardiography for the differential diagnosis of atrial masses

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