## Case Reports: Tales from the Trenches

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## Vscan\* for right atrial mass

A 33-year-old man presented for the second time to the Emergency Department for worsening pain in his lower back. He had visited the department a month earlier with the same complaint after helping a friend move. At that time, an x-ray exam had been negative and he was discharged with pain medications.

On this second visit, he reported worsening back pain and a 16-pound weight loss over the past month, a one-week history of coughing up blood, and a palpable chest mass. On exam, he was noted to be pale, cachectic, tachypneic, and tachycardic.

An echo exam was performed utilizing the pocket-sized Vscan ultrasound device. The long and short views (Figs. 1-4) appeared normal. However, the apical four-chamber view (Figs. 5 and 6) helped reveal a right atrial mass—suspicious for clot versus tumor.

An HIV test was positive. A chest-to-pelvis CT scan helped demonstrate multiple bilateral pulmonary emboli, hepatic and IVC thrombus extending to the right atrium, and multiple soft-tissue metastases from the thoracic cage to the pelvis. The final tissue diagnosis was fully differentiated metastatic hepatic cellular carcinoma.

## **Discussion**

As this case demonstrates, the Vscan can be of great value for emergent point-of-care evaluation of the heart. In the ill-appearing patient with multiple undifferentiated complaints, the Vscan helps the busy physician rapidly narrow a lengthy differential diagnosis.



## High-quality ultrasound, literally at your fingertips.

Emergency Department physicians don't always have immediate access to comprehensive ultrasound exams. The solution? GE Healthcare's new, pocket-sized Vscan ultrasound device.

The Vscan is portable enough to slip into the pocket of a lab coat for on-the-spot evaluations.

In fact, Emergency Medicine physicians are finding that its performance and excellent image quality can speed diagnosis and initiation of the appropriate treatment, supporting the goals of improving outcomes and streamlining patient management.



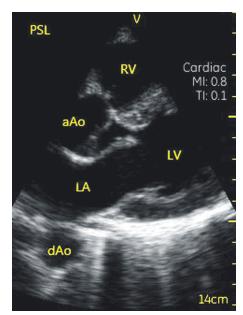


Figure 1: Parasternal long view (displayed in EM screen orientation) with right ventricle (RV), ascending aorta (aAo), left ventricle (LV), left atrium (LA), and descending aorta (dAo).

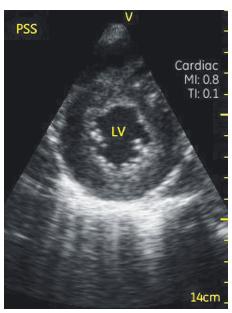


Figure 2: Parasternal short view of left ventricle (LV).

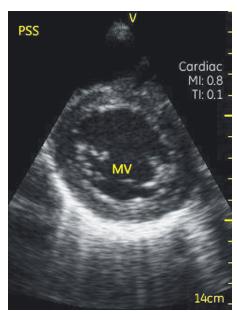


Figure 3: Parasternal short view of mitral valve (MV).

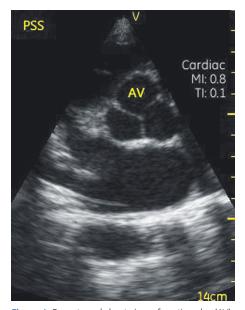


Figure 4: Parasternal short view of aortic valve (AV).

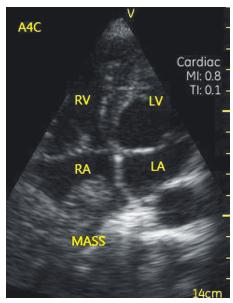
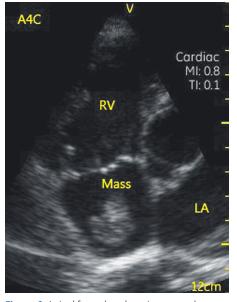


Figure 5: Apical four-chamber view of right atrium (RA) with mass, right ventricle (RV), left ventricle (LV), and left atrium (LA).



**Figure 6:** Apical four-chamber view moved medially to better visualize right atrium (RA) with mass and right ventricle (RV).

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