The patient is a 74-year-old man with a history of persistent atrial fibrillation with symptomatic episodes of bradycardia and elected to proceed with placement of a single-chamber leadless pacemaker (Nanostim, St. Jude Medical, Inc., St. Paul, MN) as part of a clinical trial. The pacemaker was placed successfully, and the patient did well overnight. The next morning it was noted that pacemaker spikes were no longer noted on telemetry, and a posterior-anterior and lateral chest radiograph was taken (Figure 1). The leadless pacemaker had dislodged from the right ventricle and embolized to a tertiary branch of the right pulmonary artery. The patient was entirely asymptomatic from embolization, as there was no occlusion of the pulmonary artery (Online Supplemental Figure 1). Using a gooseneck snare, from the femoral venous approach, the pacemaker was retrieved quickly and without any other complications (Online Supplemental Video 1).

Pacemakers are inserted via a femoral venous approach, advanced through the inferior vena cava into the right atrium, across the tricuspid valve and are placed near the right ventricular apex. In comparison to a traditional pacemaker, the leadless device does not occlude the subclavian vein, has a significantly lower infection rate, is associated with improved cosmesis, and has a longer battery life. The most feared complication is dislodgment of the device. Even with a dislodgment, however, patients can be asymptomatic and the device can be quickly and safely retrieved.

Appendix
Supplementary data
Supplementary data are available in the online version of this article at http://dx.doi.org/10.1016/j.hrthm.2016.09.006

References