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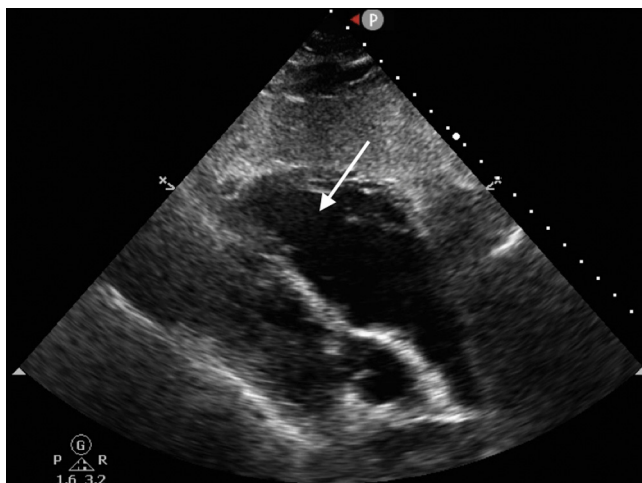
<https://doi.org/10.1016/j.annemergmed.2019.02.021>

Figure 1. Point-of-care ultrasonography demonstrating dilated right ventricle (arrow).

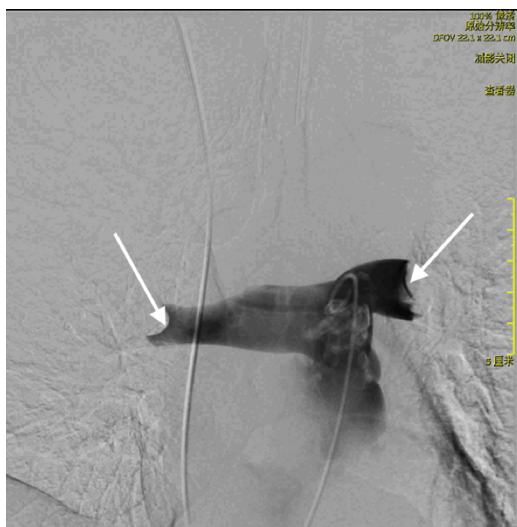


Figure 2. Left and right main pulmonary arteries' blood flow obstructed by an embolus (arrows).



Figure 3. Large dendroid emboli extracted from the left and right main pulmonary arteries.

[Ann Emerg Med. 2019;74:332.]

A 53-year-old man was transported to the emergency department with collapse after chest tightness. He had a history of deep venous thrombosis but discontinued rivaroxaban 2 months ago. The patient was critically ill, with a blood pressure of 76/50 mm Hg, a pulse rate of 80 beats/min, and oxygen levels of 78% on room air at 9 breaths/min. The emergency physician intubated the patient and performed bedside ultrasonography; this demonstrated a massive right ventricle (Figure 1 and Video E1 [available online at <http://www.annemergmed.com>]).

For the diagnosis and teaching points, see page 344.

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DIAGNOSIS:

Massive pulmonary embolism. The emergency team initiated venoarterial extracorporeal membrane oxygenation. Digital subtraction angiography confirmed embolism in the left and right main pulmonary arteries (Figure 2). After failure of catheter embolectomy, large emboli were surgically extracted (Figure 3). The patient was discharged from the hospital at day 15, with good neurologic function.

In our case, bedside ultrasonography was instrumental in obtaining a timely diagnosis.¹ Although massive pulmonary emboli may be treated with hemodynamic and respiratory support, systematic anticoagulation, and reperfusion or clot extraction,² in select cases venoarterial extracorporeal membrane oxygenation is a promising salvage therapy.^{3,4}

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