A 67-year-old woman admitted to the hospital with syncope was found to have platypnea-orthodeoxia caused by a dilated aortic root. A transesophageal echocardiogram was taken in the supine and sitting positions (Figure). The images taken in the supine position showed the foramen ovale was closed. The images taken in the sitting position show the foramen ovale was wide open, with a massive right-to-left shunt across the defect. Oxygen saturation fell precipitously from 92% to 75% in the sitting position. The patient underwent placement of an Amplatzer patent foramen ovale occluder device and was symptom-free 8 months later.