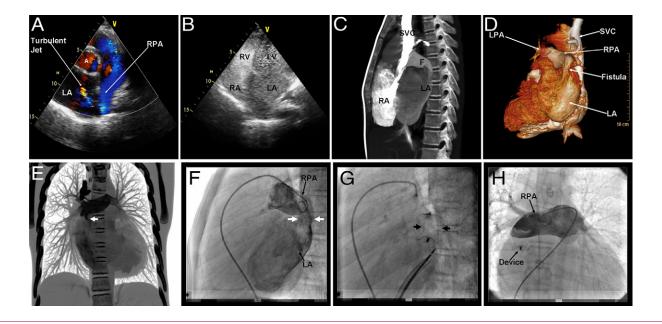
## **IMAGES IN CARDIOLOGY**

## Multimodality Imaging and Transcatheter Closure of a Giant Right Pulmonary Artery to Left Atrium Communication

## A Rare Cause of Cyanosis

Sudhanshu Kumar Dwivedi, MD, DM,\* Sharad Chandra, MD, DM,\* Sudarshan Kumar Vijay, MD,\* Ram Kirti Saran, MD, DM,\* Neera Kohli, MD,† Ragini Singh, MD†

Lucknow, U.P., India



From the \*Department of Cardiology, C.S.M. Medical University (King George Medical College), Lucknow, U.P., India; and the †Department of Radiodiagnosis, C.S.M. Medical University (King George Medical College), Lucknow, U.P., India. Manuscript received February 14, 2012; accepted February 29, 2012.

13- year-old male presented to us with a history of cyanosis and dyspnea. His two-dimensional transthoracic color Doppler echocardiogram showed a turbulent color jet (A, Online Video 1) from the right pulmonary artery to the left atrium. Contrast echocardiography revealed early dense opacification of the left atrium and the left ventricle with microbubbles (B, Online Video 2) within 2 cardiac cycles. Multidetector computed to-mography angiography (lateral view) (C) and three-dimensional volume-rendered computed tomography imaging (D) showed a large (2-cm diameter) fistulous communication between the right pulmonary artery and the left atrium (E, white arrow) with normal peripheral branching of both pulmonary arteries. Subsequent cardiac catheterization and selective right pulmonary arteriogram (left lateral view) delineated the course and waist (15 mm) of the fistula (F, white arrows, Online Video 3). Using a transseptal approach, the Cocoon duct occluder (Vascular Innovations Co., Ltd., Nonthaburi, Thailand) (18 × 20 mm) was successfully deployed (G, black arrows, Online Video 4) across the fistula with no residual shunt (H, Online Video 5).