48 year-old woman with a left main coronary artery (LMCA) stent and much more...

Leon Shturman, MD, Amar Shah, MD, Jeffrey Jednacz, MD, Ignacio Inglessis, MD, Suhny Abbara, MD, and Wilfred Mamuya, MD, PhD

Clinical History
A 48 year-old woman, status-post failed patent ductus arteriosus (PDA) surgical closure complicated by Eisenmenger syndrome with severe pulmonary hypertension, underwent left main (LM) artery stenting secondary to focal extrinsic ostial left main coronary artery (LMCA) compression by a markedly dilated pulmonary artery (Fig. 1, arrow). She was referred for a dual source coronary CT angiogram (DSCT) evaluation of LMCA stent patency, in-lieu of traditional coronary angiography.

Findings
A LMCA stent measuring 5x16 mm was found to be widely patent with protrusion of its proximal portion into the aortic lumen (Fig. 2, arrow). In addition, DSCT demonstrated a markedly dilated pulmonary arterial (PA) system. The right pulmonary artery was noted to have an organized mural thrombus (Fig. 3, arrows). The PDA was demonstrated in the proximal segment of the descending aorta measuring 1.7 cm in the greatest diameter (Fig. 4, asterisk).

Discussion
LMCA stenting is emerging as a viable alternative to coronary artery bypass surgery in a few carefully selected patients. A post-surveillance coronary angiogram in 3-6 months is currently considered part of the standard of care. DSCT represents a valuable non-invasive imaging tool capable of providing this type of surveillance. Furthermore, this case illustrates the additional capability of DSCT in elucidating other important and clinically relevant findings in a single examination.

REFERENCES