Images in Cardiology

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Coronary Artery Fistula

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FIG. 1 Stress and rest technetium 99m sestamibi single-photon emission computed tomography showing a moderate size, fully reversible stress-induced myocardial perfusion defect involving the anterior wall and apex of the left ventricle, and a partially reversible stress perfusion defect involving the inferior wall.

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A 60-year-old Philippine man with unremarkable past medical history presented with exertional chest discomfort and dyspnea. Stress myocardial perfusion imaging showed moderate-sized, stress-induced, reversible defects involving the anterior, apex, and inferior walls of the left ventricle (Fig. 1). Subsequent coronary angiography showed large coronary artery fistulae between the proximal right coronary artery (RCA) and the pulmonary artery (Fig. 2A) and between the

FIG. 2 (A) Coronary artery fistula (arrowhead) between the conus branch of the right coronary artery and the pulmonary artery, shown in the left anterior oblique view. (B) Coronary artery fistula (arrowhead) between the proximal left anterior descending artery and the pulmonary artery, shown in the left anterior oblique view.

left anterior descending (LAD) coronary artery and the pulmonary artery (Fig. 2B), with no atherosclerotic disease. Cineangiography also showed marked underfilling of the distal LAD and RCA consistent with "coronary steal," as depicted in cardiac perfusion imaging (Fig. 1).

Reference

Said SAM, El Gamal MIH, Van Der Werf T: Coronary arteriovenous fistulas: Collective review and management of six new cases—changing etiology, presentation, and treatment strategy. *Clin Cardiol* 1997;20: 748–752

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