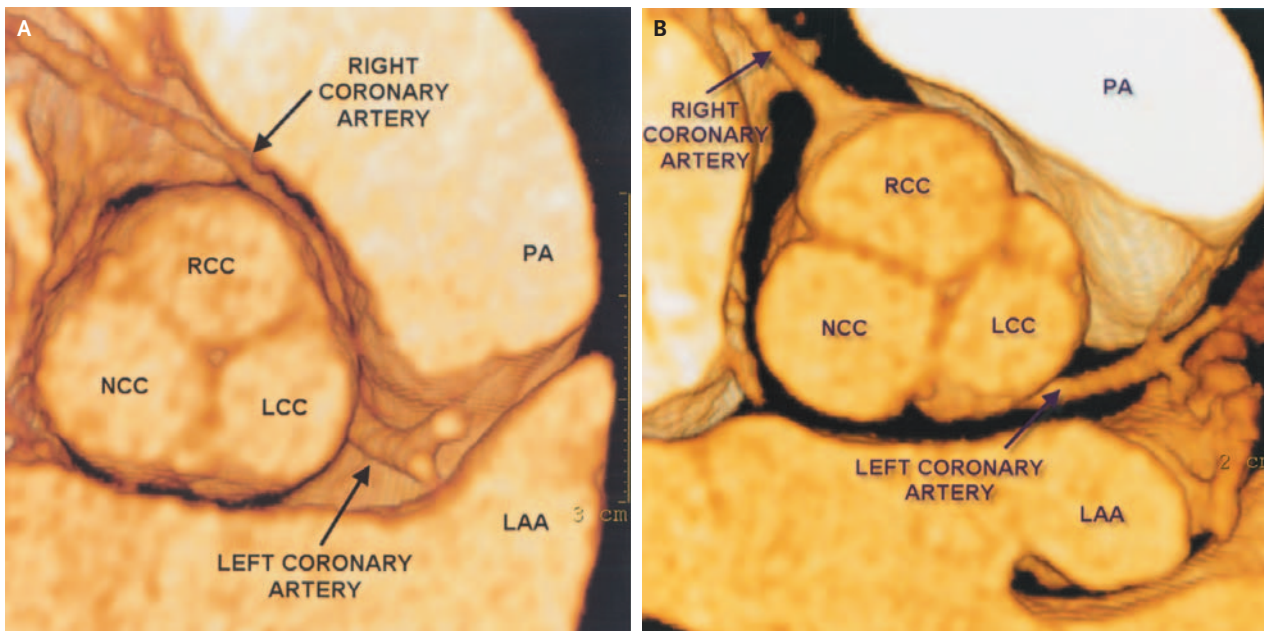


IMAGES IN CLINICAL MEDICINE

Anomalous Origin of the Right Coronary Artery



Samuel Wann, M.D.
 Gregory Schuchard, M.D.
 Wisconsin Heart Hospital
 Milwaukee, WI 53226

A 49-YEAR-OLD MAN PRESENTED FOR EVALUATION OF PALPITATIONS AND epigastric and burning pain in the lower chest. Treadmill exercise testing with technetium-99m imaging was suggestive of inferior-wall myocardial ischemia. Computed tomographic (CT) coronary angiography (Panel A), performed with a 16-slice scanner after the intravenous injection of 100 ml of iodinated contrast medium, showed anomalous origin of the right coronary artery from the left coronary cusp (LCC). A CT coronary angiogram from a patient with normal coronary arteries is shown for comparison (Panel B). The noncoronary aortic cusp (NCC) and right coronary cusp (RCC), as well as the pulmonary artery (PA) and the left atrial appendage (LAA), are also identified in the image. Cardiac ischemia in this setting is presumed to be caused by compression of the anomalous right coronary artery as it courses between the PA and the aorta. No luminal obstruction was identified in these arteries or in the remainder of the coronary tree. These findings were confirmed on intra-arterial coronary angiography. The patient has been asymptomatic for the past year while being treated with beta-blockers.

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