

FIGURE 270e-6 Multidimensional cardiac imaging protocol with positron emission tomography. The *left upper panel* demonstrates stress and rest short-axis images of the left and right ventricles demonstrating normal regional myocardial perfusion. The *middle panel* demonstrates the quantitative bull's-eye display to evaluate the extent and severity of perfusion defects. The *lower right panel* illustrates the time-activity curves for quantification of myocardial blood flow. The *right upper panel* demonstrates electrocardiogram-gated myocardial perfusion images from which one can determine the presence of regional wall motion abnormalities and calculate left ventricular volumes and ejection fraction. LAD, left anterior descending artery; LCX, left circumflex artery; RCA, right coronary artery; TOT, total left ventricle.

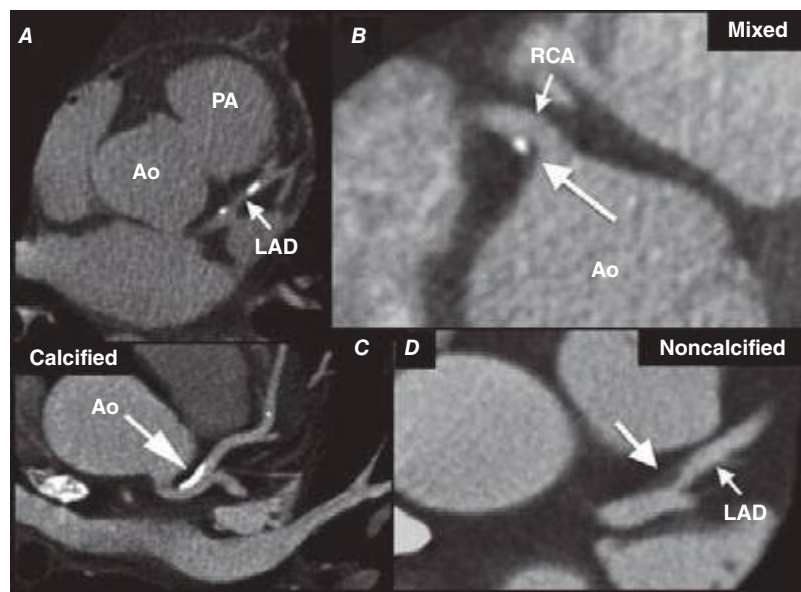


FIGURE 270e-7 Examples of non-contrast- and contrast-enhanced coronary imaging with computed tomography (CT). **A**. Calcified coronary plaques in the distal left main and proximal left anterior descending coronary artery (LAD) in a noncontrast cardiac CT scan. Calcium deposits are dense and present as bright white structures on CT, even without contrast enhancement. **B**, **C**, and **D**. Different types of atherosclerotic plaques on contrast-enhanced CT scans. Importantly, noncalcified plaques are evident only on contrast-enhanced CT scans. AO, aorta; PA, pulmonary artery; RCA, right coronary artery.