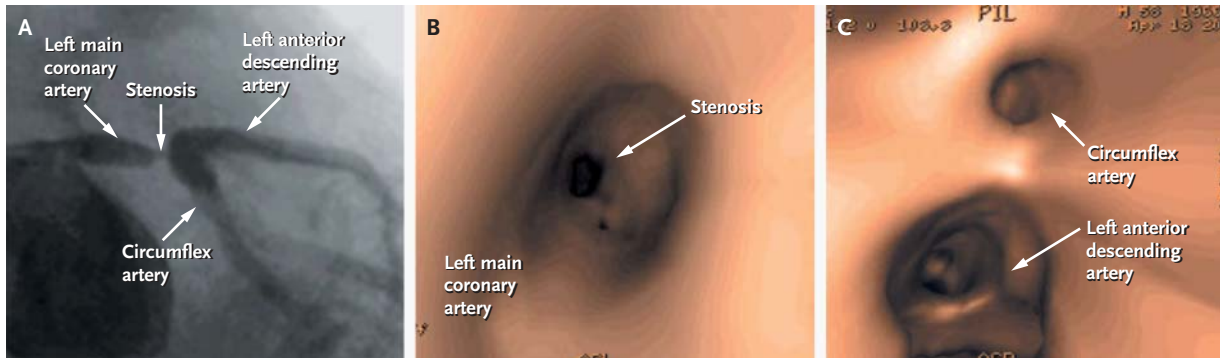


IMAGES IN CLINICAL MEDICINE

Intracoronary Imaging with Multislice Spiral Computed Tomography



A 54-YEAR-OLD MAN WITH A THREE-WEEK HISTORY OF EXERTIONAL ANGINA and abnormal results on an exercise test underwent selective coronary angiography, which showed a severe concentric stenosis of the distal portion of the left main coronary artery (Panel A). On the previous day, multislice spiral computed tomography had been performed. This technique allows noninvasive imaging of coronary arteries with the use of multiple detectors, high rotational velocity, and an electrocardiographically gated scanner. Imaging was performed after intravenous injection of 100 ml of nonionic iodide at a rate of 4 ml per second. Three-dimensional reconstruction of the intracoronary anatomy, obtained during an 18-second inspiratory breath-holding session, shows the left main coronary artery (Panel B) and the bifurcation and proximal portion of the left anterior descending and circumflex coronary arteries (Panel C). One month after undergoing coronary-artery bypass surgery, the patient was doing well and was participating in an outpatient cardiac-rehabilitation program.

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Egidio Traversi, M.D.
Roberto Tramarin, M.D.

IRCCS Fondazione Salvatore Maugeri
I-27100 Pavia, Italy