Life-saving collateral circulation

A 77-year-old man presented with angina pectoris. Coronary arteriography showed complete occlusion of the left main coronary artery, circumflex artery, distal part of the right coronary artery, and a collateral artery showing an excellent grade-3 coronary collateral flow between the acute margin branch of the right coronary artery and the distal tip of the left anterior descending artery which was occluded before the first diagonal artery (Fig. A). After a successful coronary artery bypass graft operation, the patient was discharged in good clinical condition.

Figure. A collateral coronary artery showing an excellent grade-3 coronary collateral flow between the acute margin branch of the right coronary artery and the distal tip of the left anterior descending artery.

Left ventricular aneurysm calcification

A 73-year-old man with a history of previous myocardial infarction was admitted to the hospital with progressive dyspnea. He also had several risk factors including chronic renal insufficiency, smoking, age, and male gender. Electrocardiography revealed normal sinus rhythm with ST-segment elevation and loss of R wave anteriorly. Chest radiography showed cardiac enlargement and abnormal contours associated with fine calcifications suggesting the presence of a calcified left ventricular aneurysm (Fig. A). A computed tomographic scan of the chest demonstrated a calcified aneurysm protruding from the anterior-apical wall of the left ventricle (Fig. B).

Aneurysms may develop as a complication of myocardial infarction. An aneurysm may be complicated by the development of calcification of the pericardium or myocardium. Chronic renal insufficiency may have facilitated aneurysmal calcium deposition in this patient, as well.

Figures. (A) A chest radiogram showing cardiac enlargement and abnormal contours associated with calcified left ventricular aneurysm. (B) A computed tomographic scan of the chest showing a calcified aneurysm protruding from the anterior-apical wall of the left ventricle.