Efficient tirofiban infusion resulting in resolution of intracoronary thrombus

A 55-year-old man had a squeezing chest pain of two-hour duration. He was referred to our cardiology department with a diagnosis of acute coronary syndrome. On admission, his blood pressure was 110/80 mmHg, and his heart rate was 52 beat/min. Physical examination was normal. His medical history was unremarkable. Electrocardiography showed 2-mm ST-segment depression and T wave inversion in DII-III and V4-6 leads. Medical treatment was instituted with 300 mg aspirin, 300 mg clopidogrel, intravenous nitrate, 25 mg meperidine, and unfractioned heparin. The patient was taken to the catheterization laboratory for primary percutaneous coronary intervention due to ongoing ischemia. Coronary angiography revealed intraluminal filling defects due to a massive thrombus, resulting in partial vessel occlusion in the proximal segment of the right coronary artery, and total occlusion of the posterolateral branch (Fig. A). The left coronary system was normal. We concluded that the proximal right coronary artery was partially occluded with the huge thrombus leading to distal coronary embolization. Tirofiban infusion was administered for 48 hours. Control coronary angiography performed at 72 hours showed complete disappearance of the intracoronary thrombus, and a large posterolateral branch appeared (Fig. B). The patient was symptom free during six months of medical therapy with aspirin, clopidogrel, and atorvastatin. Intensive antiaggregant therapy with tirofiban and clopidogrel may avoid unnecessary percutaneous coronary intervention in patients with acute coronary syndrome due to intracoronary thrombus.

Figures. (A) The right coronary angiogram in the left anterior oblique view demonstrating intraluminal filling defects due to massive thrombus, and total occlusion of the posterolateral branch. (B) Control coronary angiography performed after tirofiban infusion showing complete disappearance of the intracoronary thrombus and a large posterolateral branch. RCA: Right coronary artery.