Milking-like effect in the left anterior descending artery secondary to systolic expansion of a post-infarction left ventricular aneurysm

A 68-year-old man with a history of hypertension and smoking presented with prolonged retrosternal chest pain in the previous eight hours. On admission, he was still symptomatic, and an electrocardiography showed Q waves and 3-mm ST segment elevation in leads V2 to V5, I, and aVL. Cardiac catheterization showed an isolated proximal left anterior descending (LAD) coronary artery occlusion (Fig. 1). Percutaneous transluminal coronary angioplasty and stenting with a drug eluting stent (Coracto 3.0×17 mm, DES-Coracto™) were performed over the residual lesion, with excellent angiography results. The patient was followed up in the cardiac care unit with medical therapy. Serial cardiac enzymes tested positive with a peak level (ultra-sensitive troponin I peak 50000 ng/mL, mass CK-MB peak 300 ng/mL) for myocardial necrosis. Two days later, the patient developed retrosternal angina again. Second cardiac catheterization was performed and showed a sharp milking-like effect, with severe systolic compression in the mid segment of LAD, despite excellent angiographic results (Video 1). A transthoracic echocardiography revealed moderate depression of left ventricular ejection fraction, true left ventricular large anterior wall and apical segments aneurysm, and mild mitral and tricuspid valve insufficiency (Fig. 2). The patient was considered for medical management in the form of necessary medications for acute coronary syndrome in addition to antianginal drugs. He remained alive in New York.

Figure 1. Acute occlusion of proximal left anterior descending coronary artery

Figure 2. True left ventricular large anterior wall and apical segments aneurysm

Heart Association functional class II one years after discharge from the hospital with pharmacological therapy. This milking-like effect was attributed to compression of the LAD coronary artery during systolic expansion of ventricular aneurysm.

Video 1. A sharp milking-like effect in the mid segment of the left anterior descending coronary artery

Uncommon right ventricular mass: Ectopic thyroid

A 53-year-old woman with complaint of intermittent angina pectoris for 2 years was admitted to our hospital for further evaluation of her cardiac mass. Routine laboratory test results including thyroid function were all normal. Electrocardiography (ECG) showed sinus rhythm with incomplete right bundle branch block. Transthoracic echocardiography indicated a mildly dilated...