

**Figure 4. View of the retrieved IVUS catheter tip**

IVUS – intravascular ultrasound

deformation from multiple uses. In conclusion we suggest that multiple use of IVUS catheter should be avoided.

**Video 1.** Right coronary angiography revealed a 60% stenosis of mid portion of the right coronary artery

**Video 2.** During withdrawn of the catheter, the distal marker of IVUS catheter was separated and this segment was moved toward the PLA

IVUS - intravascular ultrasound, PLA - postero-lateral artery

**Video 3.** Loop snare catheter was passed over the guidewire and inserted through a 4F transport catheter

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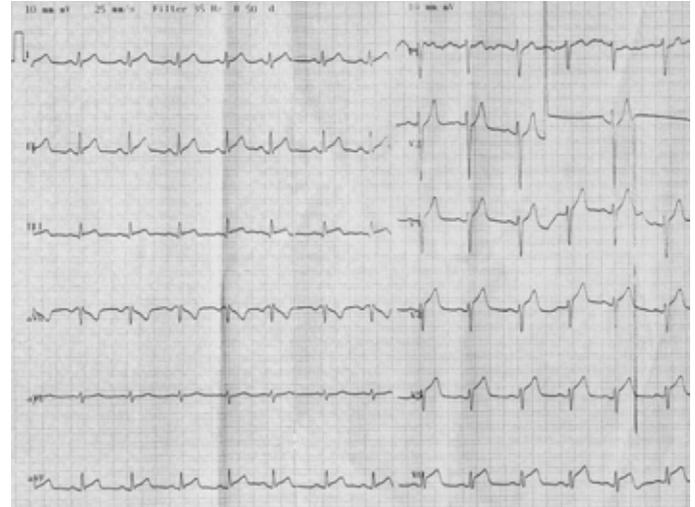
## Acute myocardial infarction secondary to blunt chest trauma treated with thrombus aspiration



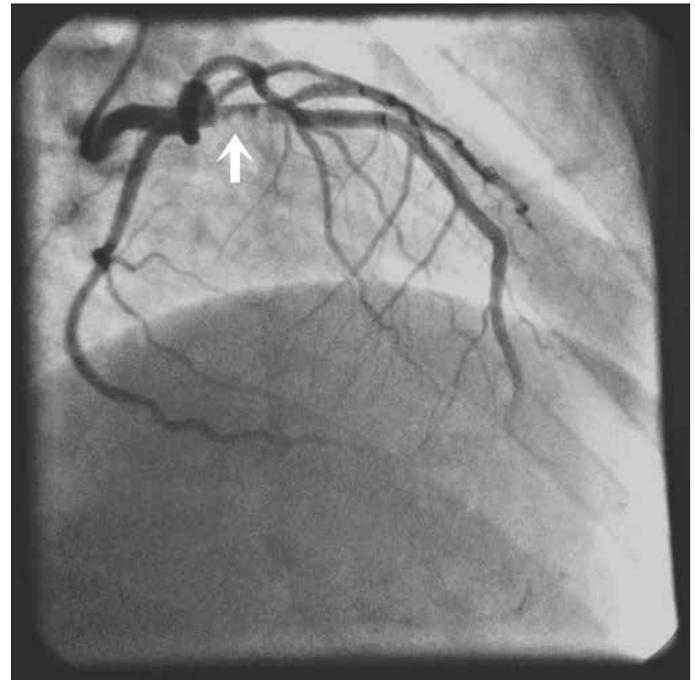
*Trombüs aspirasyonu ile tedavi edilen künt göğüs travmasına bağlı akut miyokart enfarktüsü*

A 34-year-old male patient was admitted to our emergency department with chest pain. Patient had a history of blunt chest trauma by

receiving a blow of fist in a fight six hours prior to his admission. On physical examination, palpation revealed tenderness on left side of the chest wall. No murmurs were heard and lungs were clear. Electrocardiography was equivocal for acute coronary syndrome and acute pericarditis (Fig. 1). Transthoracic echocardiography demonstrated anteroapical wall hypokinesia with a localized, minimal pericardial effusion adjacent to right ventricle. Left ventricular ejection fraction (LVEF) was 45%. Since there was wall motion abnormality, urgent coronary angiography was planned. Coronary angiography demonstrated intraluminal thrombosis in proximal region of left anterior descending coronary artery which was already embolized distal of the artery (Fig. 2, Video 1. See corresponding video/movie images at [www.anakarder.com](http://www.anakarder.com).

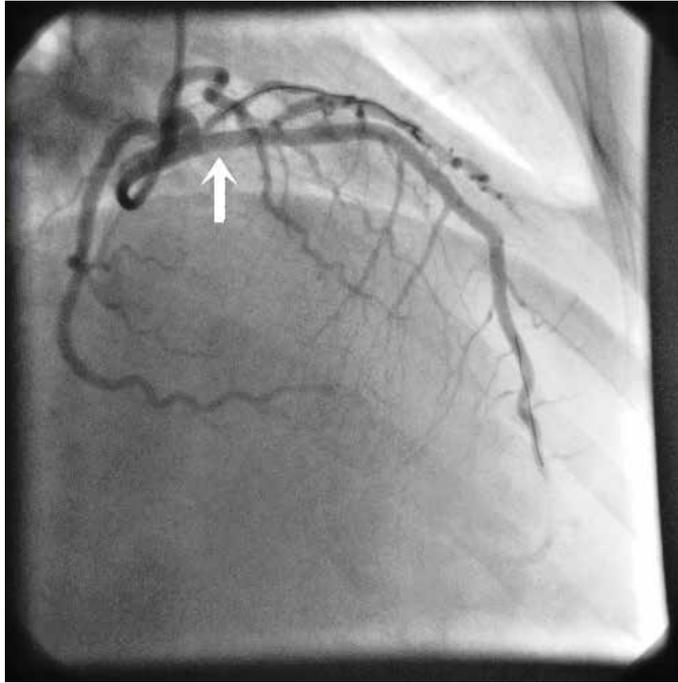


**Figure 1. Electrocardiography showing diffuse ST segment elevation without pathological Q wave and reciprocal ST segment depression. Note that, slender PR segment depression in inferior derivation, PR segment elevation in aVR and ST elevation is concave-upward in all derivations except lateral derivations**

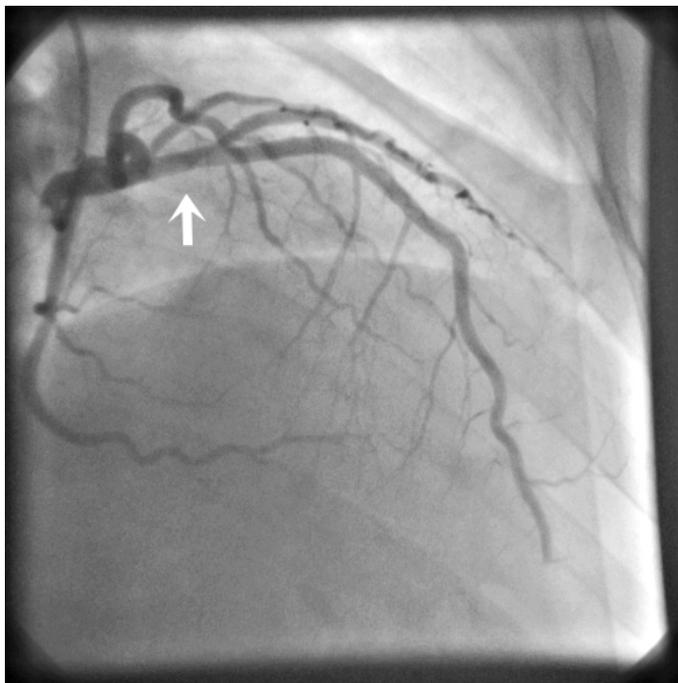


**Figure 2. Coronary angiography showing intraluminal thrombosis (arrow) in proximal region of left anterior descending coronary artery which was already embolized distal of the artery**

com). Thrombus aspiration with thrombus aspiration catheter was applied to the proximal and distal thrombosis. Proximal thrombus was treated adequately by aspiration catheter without stent implantation. Distal embolus persisted despite the aspiration catheter application (Fig. 3, Video 2. See corresponding video/movie images at [www.anakarder.com](http://www.anakarder.com)). After 48 hours tirofiban infusion, control coronary angiography was performed (Fig. 4, Video 3. See corresponding video/movie images at [www.anakarder.com](http://www.anakarder.com)). Control echocardiography revealed an LVEF of 50% and left ventricular apical hypokinesis with minimal pericardial



**Figure 3.** Proximal thrombosis (arrow) is treated adequately by aspiration catheter without stent implantation. Despite aspiration, distal thrombosis persisted



**Figure 4.** Control coronary angiography after tirofiban infusion

effusion. Patient was discharged without pain in the 5<sup>th</sup> day of hospitalization. Patient was symptom-free in the first month follow-up visit.

Diagnosis of myocardial infarction secondary to blunt chest trauma may be challenging. Both pericarditis and myocardial ischemia may be presented in same patient suffering blunt chest trauma. Shear force leading to intimal rupture is the possible trigger of the thrombus formation causing coronary accident. Frequently used treatment options in these cases are percutaneous coronary intervention and coronary bypass surgery. To the best of our knowledge, this is the first case with acute myocardial infarction secondary to blunt chest trauma, treated with thrombus aspiration.

**Video 1.** Coronary angiography showing intraluminal thrombosis in proximal region of left anterior descending coronary artery which was already embolized distal of the artery

**Video 2.** Proximal thrombosis is treated adequately by aspiration catheter without stent implantation. Despite aspiration, distal thrombosis persisted

**Video 3.** Control coronary angiography after tirofiban infusion

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## A closer sight to the transapical cardiac resynchronization therapy

### *Transapikal kardiyak resenkronizasyon tedavisine daha yakın bir bakış*

A 55-years-old Caucasian male with dilated cardiomyopathy and depressed left ventricle ejection fraction (LVEF) (about 37%) was implanted with a bicameral pacemaker (PM) because of a second degree atrio-ventricular block complicating a myocardial infarction. A 6 months follow-up transthoracic echocardiography (TTE) showed a left intra-ventricular dyssynchrony (Fig.1A), with a standard deviation of 14% and a delay of activation between septum and lateral wall >120 msec; these findings were hypothesized as a cause of the worsening of the clinical status (NYHA III), of a marked reduction of the LVEF (30%) and of a severe mitral regurgitation (Fig. 1B, C, Video 1, 2. See corresponding video/movie images at [www.anakarder.com](http://www.anakarder.com)). A new resynchronization therapy was identified to be done and PM upgrade was performed: due to the failure of coronary sinus lead implantation, the pacing electrode was implanted using a transapical approach (by a left minithoracotomy and transthoracic two-stage Seldinger-type puncture and dilatation of the apex) and it was placed on the interventricular septum (Fig.1D-F). This technique was preferred to epicardial implantation in order to