

Figure 3. Macroscopic view of the thrombus aspirated from left anterior descending artery

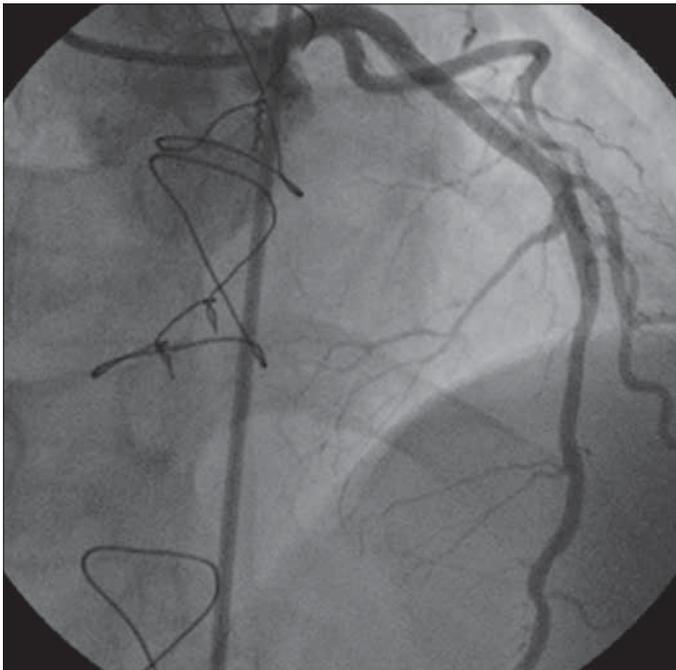


Figure 4. Angiographic view of the left main coronary artery, left anterior descending artery, and left circumflex artery after transcatheter aspiration embolectomy

fibrillation or cardiac tumors (1-4). Coronary embolisms are mostly seen in the left anterior descending artery (LAD) territory rather than the other main coronaries because of the usual straighter course of the proximal part of LAD.

There is no consensus about the optimal management for coronary embolism. Percutaneous catheter aspiration embolectomy, percutaneous transluminal coronary angioplasty with or without stent placement and administration of systemic thrombolytic agents are the current treatment options (5, 6). Among these recanalization techniques, stent implantation is not recommended (7).

Combination protocols have been tried for coronary embolism. Atmaca et al. (8) reported a successfully managed coronary embolism in a patient with a mechanical mitral valve by using a half dose tissue plasminogen activator and tirofiban. We have administrated intravenous tirofiban to our case in the first 24-hours although there is no consensus for the use of glycoprotein 2b/3a inhibitors and subsequently performed catheter aspiration embolectomy. In recent expert reports, thrombus aspiration embolectomy is the suggested treatment option for coronary embolism (9, 10). Since the efficacy and safety of triple anti-

coagulation therapy (warfarin + dual antiplatelet therapy) in embolic acute coronary syndromes remain unclear, we have ordered warfarin plus aspirin to our patient in the maintenance therapy.

Conclusion

Although there is no consensus about the optimal reperfusion strategy of embolic myocardial infarctions, catheter aspiration embolectomy may be the most valuable strategy for suitable cases.

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Late bare-metal stent thrombosis in a patient with Crohn's disease

Crohn hastalıklı bir hastada geç çıplak metal stent trombozu

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Introduction

Stent thrombosis (ST) is classified as acute (if it occurs within the first 24-hours), subacute (if it happens between 1-30 days), late (if it ensues between 31 days to 1 year), and very late (if it occurs later than 1 year) after the stent placement (1). The late ST is not common with bare-metal stents (BMS) since the stent endothelialization is considered to be completed within 4 weeks after the intervention.

The inflammatory bowel disease (IBD) is associated with prothrombotic state and impaired endothelialization (2, 3).

We described herein a patient with IBD who presented with late ST 4 months after BMS implantation.

Case Report

A 42-year-old male patient was admitted with acute anterior myocardial infarction. He had a medical history of smoking and Crohn's disease (CD). The diagnosis of the CD for the patient had been made with a colonoscopy and biopsy two years ago. The patient's coronary angiography revealed total occlusion in the middle segment of the left anterior descending artery (LAD) (Fig. 1). A bare metal stent with the size of 2.75x15 mm was implanted in the LAD (Fig. 2). The patient was discharged without complications and was put on the antiplatelet treatment of the clopidogrel 75 mg/day and aspirin 100 mg/day.

After 4 months, he was readmitted with an acute anterior myocardial infarction. The patient was still on antiplatelet therapy with clopidogrel and aspirin. The patient's coronary angiography revealed total in-stent thrombosis in the LAD (Fig. 3). The thrombotic occlusion was passed using a floppy guide wire and balloon angioplasty with the sizes of 3.0x15 mm was inflated at the site of the occlusion, resulting in the dissipation of the thrombus then Thrombolysis in Myocardial Infarction (TIMI) III flow was established (Fig. 4). Furthermore, the blood counts of the patient were found to be elevated and accordingly the white cell count was $18.2 \times 10^3/\text{ml}$, C-reactive protein level was 42 mg/L, and erythrocyte sedimentation rate was 55 mm/h. Finally, the patient was prescribed to receive indefinite dual antiplatelet therapy with aspirin and clopidogrel. We observed no recurring complications at the first and the third month follow-up appointments.

Discussion

The late ST is reported to be seen in less than 1% of the patients receiving the BMS implantation. A recent relevant study demonstrated that the incidence of ST in patients treated with coronary stent was 2.1%, whose 32% was acute, 41% was subacute, 13% was late and 14% was very late ST (4).

The IBD is a well-established risk factor for the occurrence of the thrombotic events. In addition, deep venous thrombosis and pulmonary artery emboli are the most common thrombotic complications in the IBD patients (2). Thrombotic events in the patients with the IBD occur during the periods of increased disease activity. Likewise, in the IBD patients with increased disease activity, plasminogen activator inhibitor-1 levels are increased and it is a potent inhibitor of fibrinolysis, working via inhibiting plasmin generation (5). In the patients with the IBD, increased inflammation and prothrombotic state are also thought to lead to the tendency for developing late ST.

For the present case, the main reason for the occurrence of late ST might be owing to the delayed endothelialization. In the literature, there

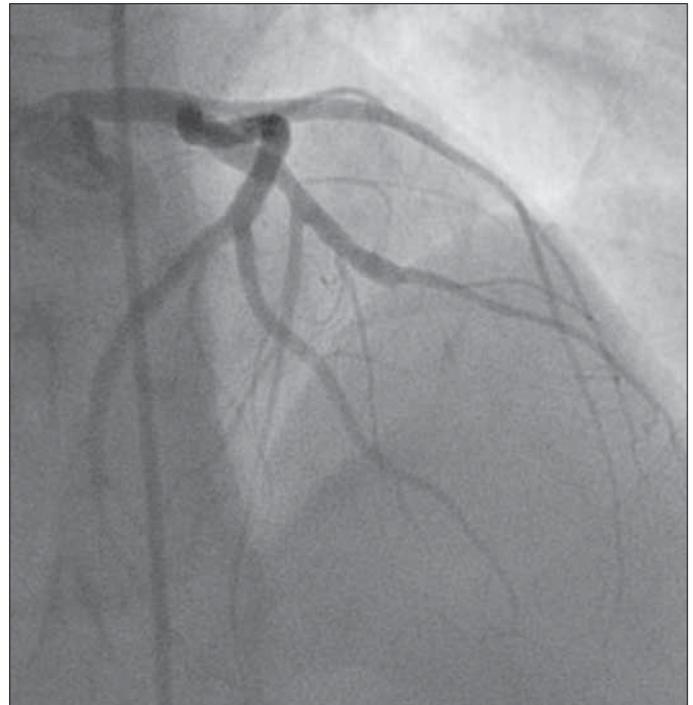


Figure 1. Coronary angiographic view of a total occlusion in the middle portion of left anterior descending coronary artery

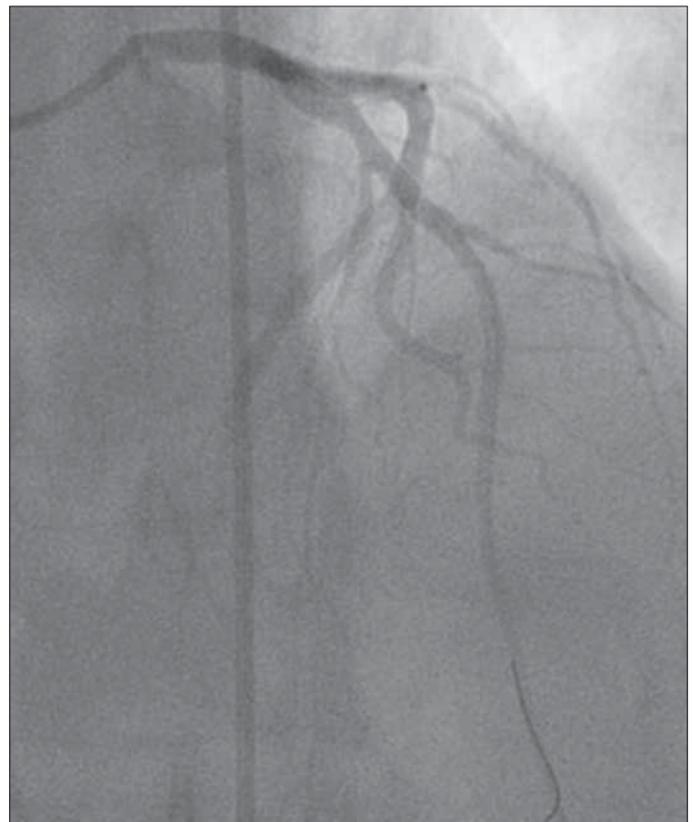


Figure 2. A bare-metal stent (2.75x15 mm) was successfully implanted in the occluded left anterior descending coronary artery

are limited data for the management of this impairment. Dual antiplatelet therapy reduces the risk of ST; therefore, in the patients with the IBD long term dual antiplatelet therapy must be considered. Another

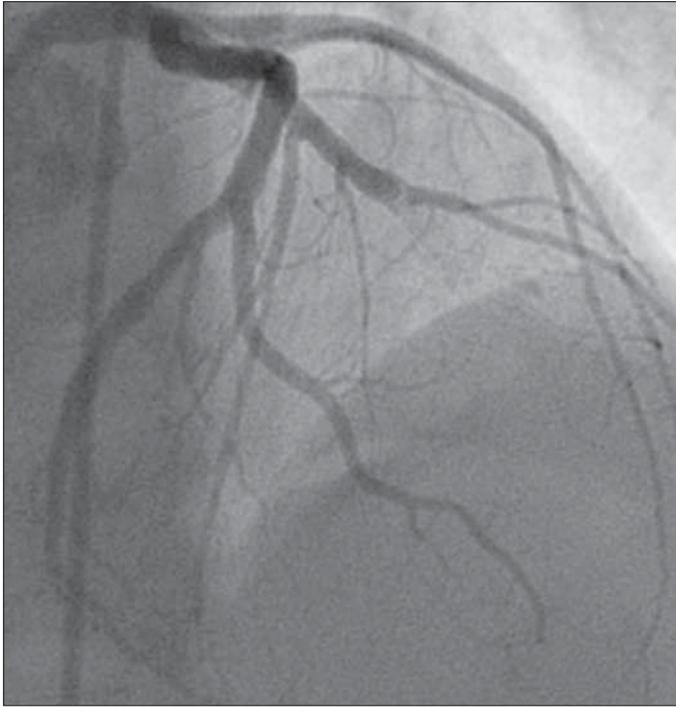


Figure 3. Coronary angiographic view of a total occlusion of the middle portion of left anterior descending coronary artery due to the stent thrombosis



Figure 4. Final coronary angiographic after balloon angioplasty

approach to prevent the formation of late ST, particularly for the patients with the acute coronary syndromes, might be the use of prasugrel instead of clopidogrel (6). In addition, it is possible that the risk of ST can be reduced with effective anti-inflammatory therapy. Similarly,

high doses of statins possessing powerful anti-inflammatory activity may be useful to prevent the development of ST.

Conclusion

Inflammatory bowel disease might trigger the development of late stent thrombosis and the presence of Crohn's disease should prompt the physician being more vigilant for the instance of such complication.

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Miyokart köprüleşmesi olan bir olguda damar daralmasının nitrogliserin ile artışı

Augmentation of vessel narrowing by nitroglycerine in a case with myocardial bridge



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Giriş

Miyokardiyal köprüleşme (MK) bir koroner arterin belirli bir kısmının kalp kası bantları altında seyretmesi ile oluşur. Koroner damarlar kalbin epikardiyal yüzeyi üzerinde seyretmelerine rağmen, kimi zaman değişik uzunluktaki bir bölümleri kas içinde derinlere inip kalp yüzeyinde yeni-