

Alveolar Hemorrhage during Abciximab Infusion

Dear Editor,

Alveolar hemorrhage following the administration of a glycoprotein IIb/IIIa receptor antagonist is an extremely rare and catastrophic complication. Only a few such cases have been reported in the literature thus far. We present a case of acute myocardial infarction complicated by diffuse alveolar hemorrhage.

A 57-year-old man was admitted to our hospital with a diagnosis of anterior ST-elevation myocardial infarction. A loading dose of aspirin (300 mg) and ticagrelor (180 mg) was given, and emergency coronary angiography was performed. After a bolus dose of unfractionated heparin (60 units/kg) was given, the occluded proximal left coronary artery was reopened by percutaneous coronary intervention with a drug-eluting stent. Due to the high thrombus burden, a bolus dose of abciximab (0.75 mg/kg) was given, and infusion via a vein pathway was scheduled for 12 hours. The patient complained of respiratory distress with hemoptysis 3 hours after the abciximab infusion. The hemoglobin level was found to be 11 g/dL, and there was no thrombocytopenia. The chest X-ray revealed bilateral pulmonary opacities (Figure 1). The abciximab infusion was then stopped, and a chest computed tomography was performed, which illustrated a sign of alveolar hemorrhage (Figure 2). The dual antiplatelet therapy (aspirin/ticagrelor) was continued. Transthoracic

echocardiography revealed a left ventricular ejection fraction of 35% with anterior and apical wall hypokinesis. The patient's symptoms and hemoptysis dramatically improved after the discontinuation of abciximab.

Acute respiratory distress with hemoptysis following the administration of abciximab should alert physicians to the likelihood of alveolar hemorrhage. Although not applied in this case, early bronchoscopy is a useful tool to confirm the diagnosis and to use a balloon tamponade or iced saline lavage. The differential diagnoses should include acute pulmonary edema and viral bronchopneumonia such as COVID-19. While therapy remains supportive with the discontinuation of all antiplatelet and anticoagulant agents, this approach may be harmful in stented patients in terms of acute stent thrombosis.



Figure 2. Computed tomography image (axial view) of the thorax shows ground-glass opacities, consistent with alveolar hemorrhage (arrows). AO, Aorta; PA, Pulmonary artery

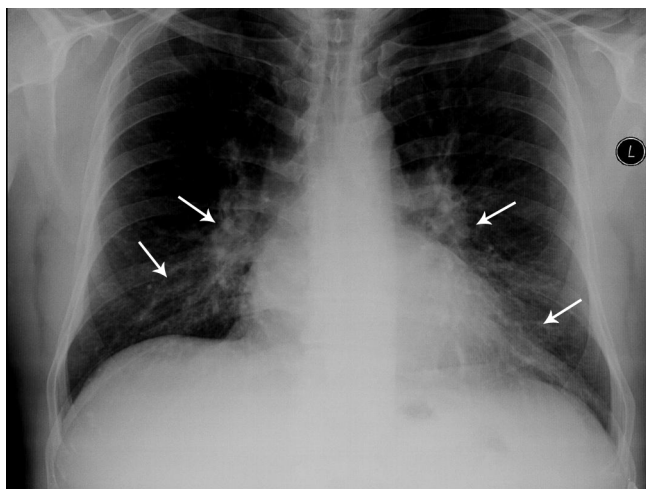


Figure 1. The chest radiography (anteroposterior view) shows bilateral pulmonary opacities (arrows).

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