A rare complication: diffuse alveolar haemorrhage following acute coronary syndrome

Rozlane krwawienie do światła pęcherzyków płucnych — rzadkie powikłanie ostrego zespołu wieńcowego

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A 48-year-old male patient with past medical history of essential hypertension and smoking was admitted to our hospital with anterior ST segment elevation myocardial infarction. After treatment with 300 mg acetyl-salicylic acid, 180 mg ticagrelor, and 7500 IU unfractioned heparin IV bolus, the patient underwent coronary angiography showing total occlusion of the left anterior coronary artery. Angioplasty was performed, but slow flow phenomenon occurred after drug eluting stent implantation. Accordingly, tirofiban bolus was administered over 3 min, followed by a 0.15-µg/kg/min tirofiban infusion. The patient was transferred to a coronary intensive care unit and his pain disappeared. Transthoracic echocardiogram revealed anterior septal wall hypokinesis with slightly decreased systolic dysfunction (ejection fraction of 50%) and mild mitral regurgitation. Then, the patient developed severe dyspnea, tachypnoea, and haemoptysis of bright red blood. On physical examination, he had diffuse rales over both lung fields. Pulse oximetry revealed a severe oxygen desaturation of 80% despite 100% O₂ support. Chest X-ray film showed bilateral diffuse opacities (Fig. 1). Chest computed tomography scan demonstrated widespread alveolar filling (Figs. 2, 3). Laboratory tests showed that the haemoglobin level declined from 15 g/dL to 12.3 g/dL, and the platelet count, prothrombin time, and partial thromboplastin time were normal. On the basis of these findings, new onset shortness of breath, and haemoptysis after administration of antiplatelet agents, diffuse alveolar haemorrhage was diagnosed. Diffuse alveolar haemorrhage is a syndrome characterised by bleeding into the alveolar spaces. It is an uncommon, serious, and life threatening event. It is under-diagnosed, so physicians should be aware that antiplatelet therapy is able to induce diffuse alveolar haemorrhage and should be used with caution in patients presenting with acute coronary syndrome, who have had severe dyspnea and haemoptysis.