Abstract: P599

An unusual complication after thrombolytic treatment of acute pulmonary embolism.

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Introduction
Pulmonary embolism (PE) guidelines recommends thrombolytic treatment for unstable patients with acute PE, but it increases the risk of severe hemorrhagic complications. We present a rare case of sub-capsular liver hematoma (SLH) after thrombolysis treatment.

Case Report
A 50-year-old-men, with a history of smoking, diabetes and ankylosing spondylitis under treatment with Infliximab and Methotrexate, was admitted due to chest pain and syncope. On admission, the patient was dyspneic, tachycardic (120 bpm), his blood pressure (BP) was 100/55 mmHg, and complaining about chest pain. ECG showed sinus tachycardia and ST depression in precordial leads. Double antithrombotic treatment (DAPT) with ticagrelor was given in the ER because NSTEMI was suspected. Urgent laboratory tests demonstrated positive D-dimer and Troponin I level, mild kidney disease and thrombocytopenia. Computed tomographic (CT) angiography confirmed a massive PE in both main pulmonary arteries. His clinical and hemodynamic state got worse. Echocardiography showed right ventricular dilatation with moderate systolic dysfunction, abnormal septal motion and mild pulmonary arterial hypertension.

He was admitted to our Cardiac intensive Care Unit where systemic thrombolysis was decided. Hemodynamic response in the first hour was favorable. Afterwards he started to complain about severe epigastric and right pleuritic pain with progressively hypotension. An urgent CT was performed and revealed a large SLH with signs of active bleeding (Picture). Due to severe hemorrhagic shock he required aggressive intravenous fluid resuscitation, blood transfusion, noradrenaline and mechanical ventilation support; he was transferred to the interventional radiology department where right hepatic artery embolization was performed and a venous filter was placed in the inferior cava.

A repeat CT 48 later showed smaller SLH without active bleeding. Patient improved gradually over period of 2 weeks, without new bleeding or thromboembolic event, but developed some complications us an acute kidney injury, mild respiratory distress syndrome, catheter-related bloodstream infection (CRBSI) and paralytic ileus. He was discharged from the ICU on 16th day and Oral anticoagulation with Dabigatran 150 mg b.i.d. was started. After 5 weeks, prolonged due to critical illness polyneuropathy and CRBSI, the patient was discharged home.

Discussion
Haemorrhage after thrombolysis is a life-threatening condition, but SLH is extremely rare. Liver spontaneous bleeding is described under anticoagulants treatment, but usually associated with liver abnormalities. Our patient had thrombocytopenia and received DAPT, that could have some relationship in this rare complication. This case report remarks that intensivist cardiologists should be familiar with uncommon complications of the thrombolytic agents, and highlights the venous filters utility when the anticoagulant treatment is contraindicated.
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