Abstract: P605

Treatment of a pulmonary embolism with low dose of tissue plasminogen activator

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Topic(s):
Pulmonary Embolism

Citation:
Introduction: Pulmonary thromboembolism (PTE) is a life-threatening disease. Systemic fibrinolysis is the first-line recommended therapy in hemodynamically instable patients with massive pulmonary embolism. Cerebrovascular insult and massive pulmonary thromboembolism, a challenge in the treatment? One possible strategy to reduce the bleeding complication is to use a lower-dose thrombolytic instead of full dose in patients with massive PE, which have been shown to be feasible. Clinical trials have demonstrated safety and efficacy of low-dose tPA.

Case Report: Patient D.D. 70 years old hospitalized due to a cerebrovascular insult presented with paralysis of the right half of the body and inability to speak. MSCT endocranium showed subacute ischaemia endocranially to the left, in the region of the thalamus and posterior crusade of the inner capsule. In the fifteenth day, during the rehabilitation, sudden choking, immeasurable blood pressure, tachycardia. Heparin bolus was administered and infusion was started Echocardiography showed right ventricular systolic pressure (RVSP) 60 mmHg, and his plasma D dimer level elevated 8155ng/ml. After MSCT pulmoangiopathy that found the thrombus of the throat on the branch of the main pulmonary artery tree propagated in both principal branches, we included alteplase 2.5 mg per hour, 50 mg total. Excellent clinical effect, decrease of RVSP, and D dimer plasma level were achieved. On the sixth day of the treatment, MSCT pulmonangiography showed a fully reconstituted pulmonary artery and its branches. On the eighth day of treatment was included DOAK-Dabigatran twice daily per 110 mg. The patient was released in a stable general condition for further ambulatory treatment.

Conclusion: Thrombolytic therapy decreases mortality and morbidity in patients with massive PE. The available data suggest that low-dose tPA may be a safe and effective treatment option for acute PTE, particularly in patients at a high risk of bleeding. More studies are needed to determine the optimal dosing regimen of tPA for PTE.
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