


Percutaneous aspiration thrombectomy as an optional treatment for pulmonary embolism

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KEYWORDS: pulmonary embolism, percutaneous aspiration thrombectomy, acute cardiac care.

CITATION: *Cardiol Croat.* 2022;17(9-10):347. | <https://doi.org/10.15836/ccar2022.347>

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Introduction: Pulmonary embolism (PE) is a life-threatening condition caused by the occlusion of a pulmonary artery by a blood clot. Reduced blood flow through lungs, lowers oxygenation and increases pulmonary blood pressure. Pulmonary embolism is one of the leading causes of hospital mortality. Symptoms of pulmonary embolism can vary, depending on the severity and degree of the obstruction of pulmonary arteries^{1,2}. Percutaneous aspiration thrombectomy is a treatment option for patients with high-risk PE with contraindications for fibrinolytic therapy and for patients with intermediate risk PE with severe tachycardia, hypoxia, and dyspnea at rest.

Case report: We present a 71-year-old female who was diagnosed with deep vein thrombosis and intermediate-high risk PE. Patient presented to the Emergency Department with shortness of breath, cough, and pale skin; she recently recovered from COVID-19 infection that puts her at high risk for PE. Multi-slice CT pulmonary angiography and arterial and venous Doppler examination was performed which revealed thrombotic masses in pulmonary arteries. The patient was admitted to the Cardiac Intensive Unit for monitoring and treatment, oxygen supplementation was administered while she was prepared for percutaneous thrombus aspiration. The procedure was performed via the right femoral vein using an aspiration catheter. The catheter was placed near affected pulmonary arteries and thrombi were removed with negative pressure aspiration. The procedure was successfully performed, and the patient was no longer hypoxic. After three days of monitoring, she was discharged from the hospital with oral anticoagulant therapy (rivaroxaban).

Conclusion: Percutaneous aspiration thrombectomy is high risk intervention that is being used in an increasing number of patients. Studies show better mortality and morbidity outcomes in patients treated with percutaneous aspiration thrombectomy. We emphasize the importance of continuous professional importance and the determination to apply new and modern techniques to ensure the highest level of healthcare.

RECEIVED:
November 2, 2022

ACCEPTED:
November 10, 2022



LITERATURE

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