Mechanical fragmentation and catheter-guided thrombolysis in intermediate risk pulmonary embolism

Abstract in English, Spanish

Acute pulmonary thromboembolism remains a significant cause of morbidity and mortality worldwide. Its diagnosis, risk stratification and early treatment are essential. The mainstay of treatment is anticoagulation. In patients with low cardiovascular risk, the prognosis is excellent and the treatment consists only of the administration of anticoagulants. Due to the poor prognosis of patients with high risk (hemodynamic decompensation), the approach is more aggressive using systemic thrombolytics, which reduce mortality but increase the risk of major hemorrhagic complications. In the intermediate-risk patients (evidence of right ventricular failure, without hemodynamic decompensation), the risk-benefit relationship of thrombolytic treatment is more balanced, so the choice is controversial. Mechanical fragmentation with catheter-directed thrombolysis is an alternative with potential benefits. We present two cases of intermediate-risk acute pulmonary thromboembolism to whom mechanical fragmentation and catheter-directed thrombolysis was applied.

Keywords: acute pulmonary thromboembolism; catheter-directed thrombolysis; intermediate risk.