A Comparison of Pharmaco-Mechanical Thrombectomy and Catheter-Directed Thrombolysis for Treatment of Thromboembolic Occlusion of Lower Limb - An Observational Case-Control Study

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Introduction

Percutaneous endovascular treatment for acute limb ischemia has gained more interest due to its less invasiveness and efficacy. Whether pharmaco-mechanical thrombolysis (PMT) (Class IIA indication) could provide a better outcome than simple catheter-directed thrombolysis (CDT) (Class I indication) required validation.

Material and Methods

- From October 2016 to April 2020, a total of 94 patients who presented with acute or subacute thromboembolic occlusion at lower limbs and received emergent endovascular treatment were enrolled.
- CDT group n = 28 (Fountain or EKOS)
- PMT group: n = 66 (Rotarex + Fountain or EKOS)
- Baseline demographics, laboratory data, angiographic and clinical outcomes were collected by chart review and cinematographic imaging.

Results

Compared with CDT, PMT for acute limb ischemia could significantly reduce the thrombolytic drug dosage and duration required for reperfusion of ischemic limb and improve the complete lysis rate.

Conclusion

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