Prošireni sažetak / Extended abstract

Catheter directed thrombolysis for acute limb ischemia: eight cases in two years

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Introduction: Acute limb ischemia (ALI) is a challenging problem in angiology. It can be associated with significant morbidity or death even after successful limb revascularization. Management of ALI depends on the clinical status of the affected limb and patient comorbidities. We assessed the efficacy and complication of catheter directed thrombolysis for ALI in our institution during 2012 and 2013.

Patients and Methods: During the period of 24 months, eight ALI patients were treated by catheter directed infusion with recombinant tissue plasminogen activator (r-tPA). Standard endovascular access and catheter techniques were involved starting with 5 mg bolus of r-TPA, followed by continuous infusion of 0.5-2 mg/h. Concomitant heparin at low dose was applied to prevent catheter-associated thrombus development. During r-TPA, infusion angiography was repeated to determine success of thrombus dissolution.

Results: There were 5 males and 3 females, mean age of 74.8 years (range, 54-90 years). One patient had upper extremity ischemia, others had lower ALI. The average duration of symptoms was 3.6 days (1-10 days). Mean duration

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*Address for correspondence: Klinički bolnički centar Zagreb, Kišpatićeva 12, HR-10000 Zagreb, Croatia. Phone: +385-91-527-3592 E-mail: majda_vrkic@yahoo.com of r-TPA infusion was 24.2 hours (16 to 4 hours), with mean dosage of 36.6 mg (range 17 to 60 mg). Three patients (38%) had complete reestablishment of blood flow with catheter thrombolysis and mean ankle — brachial index (ABI) improved from 0.22 to 0.85. The other 4 patients (50%) had partial restoration of flow and needed additional endovascular or surgical intervention with final mean ABI improvement from 0.39 to 0.98. In one case catheter directed thrombolysis failed to reestablish blood flow and the patient underwent the bypass surgery. Only one patient had severe periprocedural complication (gastrointestinal bleeding) requiring a blood transfusion. Small access site hematoma was noticed in all of the treated patients. In the follow-up period (7 to 20 months) one patient had unfavorable course of affected limb which ended with an amputation 15 months after thrombolysis. The other seven patients were stabile, without significant impairment of the treated limb.

Conclusion: Selective thrombolysis should be considered for ALI patients with the symptom onset less than 14 days and without motor deficit of the affected limb. It is a time-consuming procedure with potential severe hemorrhagic complications. With the proper patient selection and coordinated multidisciplinary team, it could result in the reestablishment of flow and an acceptable bleeding complication rate.

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Literature

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