
035. Short-Term Outcomes for Catheter-Directed Thrombolysis for Non-Threatening Acute Limb Ischaemia: A Systematic Review and Meta-Analysis

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ABSTRACT

Background: Acute limb ischemia (ALI) is a rapid reduction in arterial blood flow to a limb, which may jeopardize its viability, particularly in sensory loss or motor impairment. Catheter-directed thrombolysis (CDT) is the preferred treatment in numerous centers for patients with marginally threatening acute limb ischemia (ALI). This meta-analysis examined the short-term effects of catheter-directed thrombolysis (CDT) for patients with non-imminent limb ischemia. **Methods:** We searched PubMed, ScienceDirect, and the Cochrane Library to locate observational papers and trials published from 2014 up to early 2024 that report on the outcomes of CDT in patients with ALI. The outcome of this study was mortality rate, amputation rate, and major bleeding. We utilized R Studio to perform the meta-analysis. **Results:** Nine trials were included, involving 1,067 patients receiving CDT for non-imminent acute limb ischemia. Our results indicate that the pooled mean short-term amputation rate was 10% (95% CI [0.06; 0.15], $p < 0.01$), the major bleeding rate was 5% (95% CI [0.00; 0.09], $p = 0.03$), and the short-term death rate was 4% (95% CI [0.03; 0.06], $p = 0.08$). Our findings indicate a low incidence of short-term death, amputation, and major bleeding in patients undergoing CDT. **Conclusion:** This meta-analysis reveals a low incidence of short-term mortality, amputation, and major bleeding in patients undergoing Catheter-directed thrombolysis. Further investigations are necessary to determine if CDT should be utilized for the revascularization of limbs with non-urgent ischemia.

Keywords: Non-threatening acute limb ischemia, Catheter-directed thrombolysis, Peripheral arterial occlusions, Rutherford classification, short-term outcomes

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