

Physician - Venous and Lymphatic System Diseases and Surgery/Endovenous Interventions

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Pharmacomechanical Thrombectomy and Catheter-Directed Thrombolysis with or Without Iliac Vein Stenting in the Treatment of Acute Iliofemoral Deep Vein Thrombosis

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Objective: This study aimed to evaluate and compare the outcomes and clinical efficacy of pharmacomechanical thrombectomy (PMCT) plus catheter-directed thrombolysis (CDT) and PMCT combined with CDT and venous stenting in the management of acute iliofemoral deep vein thrombosis and assess the long-term safety and efficacy of these interventions.

Methods: This retrospective case-control study involved 112 patients who presented with acute symptomatic iliofemoral deep vein thrombosis. All patients had a symptom duration of less than 14 days. Sixty-three patients underwent PMCT + CDT, while the remaining 49 underwent PMCT + CDT + venous stenting. Clinical features and outcomes were compared between the two groups. Additionally, patients were followed for 24 months after treatment, during which quality of life and severity of postthrombotic syndrome (PTS) were analyzed.

Results: Survival analyses for primary, primary-assisted, and secondary patency yielded comparable results for PMCT + CDT ($p=0.74$, $p=0.58$, and $p=0.72$, respectively). The two-year patency rate was high in both groups (85.7% for PMCT + CDT vs. 83.7% for PMCT + CDT + venous stenting). During the follow-up, there were no statistically significant differences observed in the incidence of PTS or the average Villalta score between the two groups. At 24 months after intervention, the incidence of PTS was 11.1% in the PMCT + CDT group and 22% in the PMCT + CDT + venous stenting group ($p=0.381$).

Conclusion: The results indicate that PMCT + CDT was effective in alleviating leg symptoms and reducing the occurrence of PTS, including the incidence of moderate-to-severe PTS. The utilization of PMCT + CDT + venous stenting therapy, tailored to individual clinical and venous conditions, may enhance long-term venous patency and lead to superior outcomes, including improved quality of life parameters.

Keywords: Deep vein thrombosis, endovascular procedures, thrombectomy.

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