Objective
We assessed the outcome of Penumbra aspiration and mechanical thrombectomy in treating ilio-femoral and IVC deep-vein thrombosis with catheter directed thrombolysis (CDT).

Method
Retrospective review of patients admitted with ilio-femoral DVT or IVC thrombus treated with Indigo Penumbra system from July 2017 to April 2019. Technical success was achieved when >75% resolution of the thrombus within 48-hours of adjunct CDT. The secondary outcome was the patency of the treated segment without recurrence of DVT within six months.

Results
Twelve patients were treated, median age 58 years (range 24-68 years), 50% male. All patients had ilio-femoral DVT and four patients had IVC involvement including one IVC filter thrombosis. Five patients had previous DVT, one patient had cancer on chemotherapy and one patient had antithrombin-3 deficiency. All patients had an estimated more than 50% of thrombus debulking. All patients had adjuvant CDT; five patients had <24 hours, two patient 25-36 hours and four patients 37-48 hours and 2-patients had 72-hours of treatment. Six patients had iliac stents. None of the patients had bleeding complications or represented with recurrent DVT within 6-months. All patients had a minimum of six months of anticoagulation.

Conclusion
Penumbra aspiration mechanical thrombectomy is a useful adjunct in reducing the duration of CDT for patients with IVC and Ilio-femoral DVT

Aspiration and mechanical thrombectomy for acute deep venous thrombosis
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