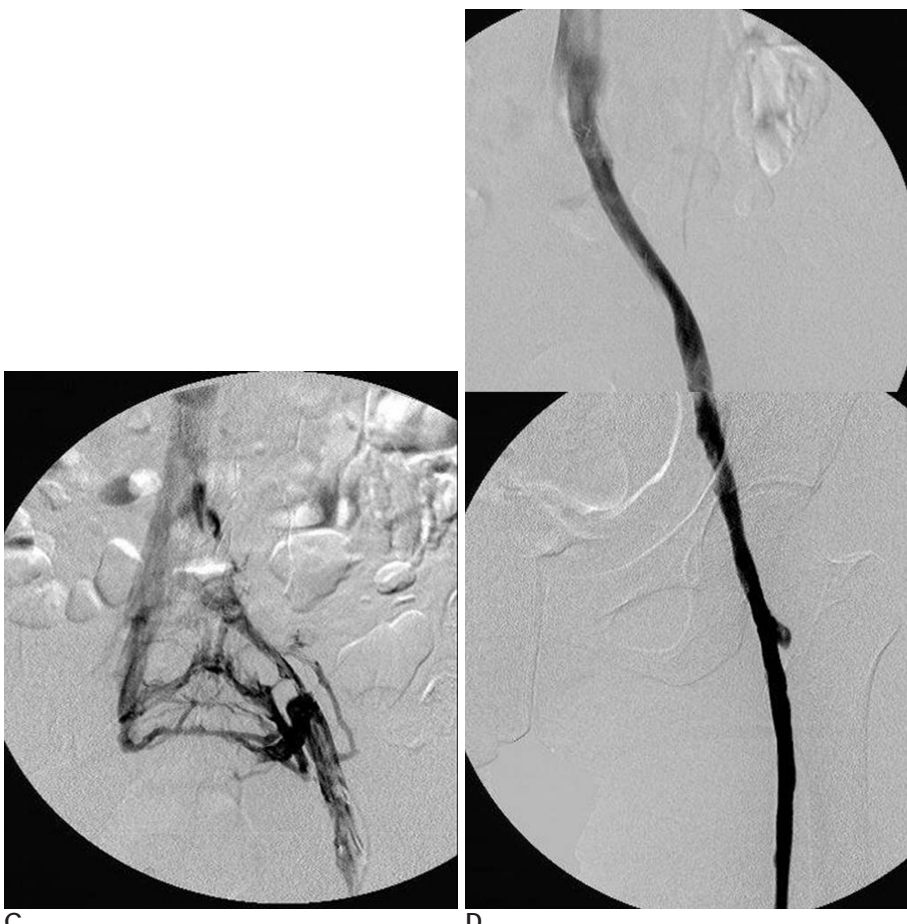
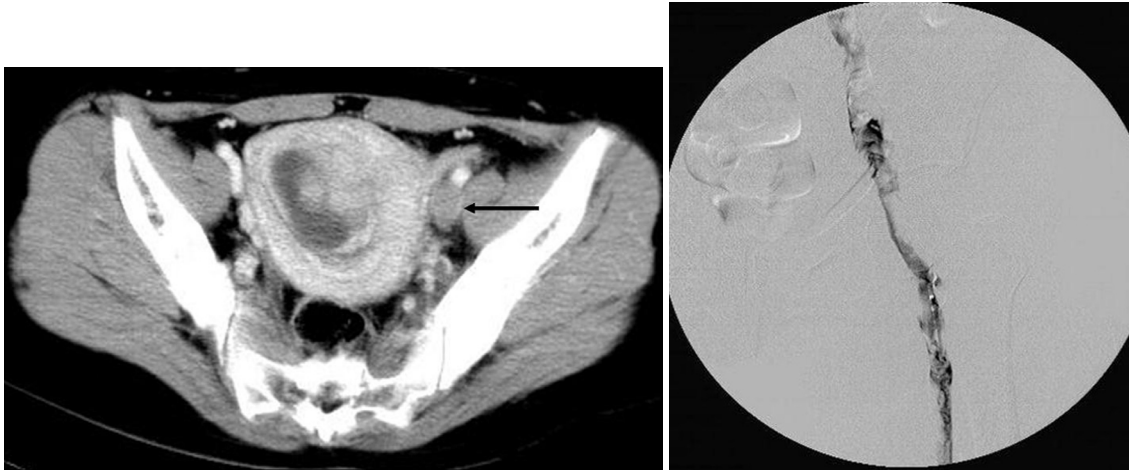


(1, 2). (Fig. 1A).  
 가  
 (2). 6 Fr. side-arm sheath (Cook, Bloomington, IN, U.S.A.)  
 (post - thrombotic syndrome)  
 (3), 3 2 (venous (Fig. 1B). 5 - Fr. (5 Fr, multi - sideport valve insufficiency) (4). catheter infusion set, Cook, Bloomington, IN, U.S.A.)  
 2 50 IU 6  
 2 150 IU  
 3 IU  
 220 IU  
 1 5  
 29  
 (Fig. 1C). 12 mm x 8 cm Nitis  
 ( 12 mm  
 (Ultra Thin Diamond, Boston Scientific, galway, Ireland)  
 3 3 8  
 (Fig. 1D). 4  
 18 7  
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 2  
 3

2007 10 29

2007 12 7



**Fig. 1.** 29-year-old early pregnant women with acute deep vein thrombosis in iliac vein compression syndrome.

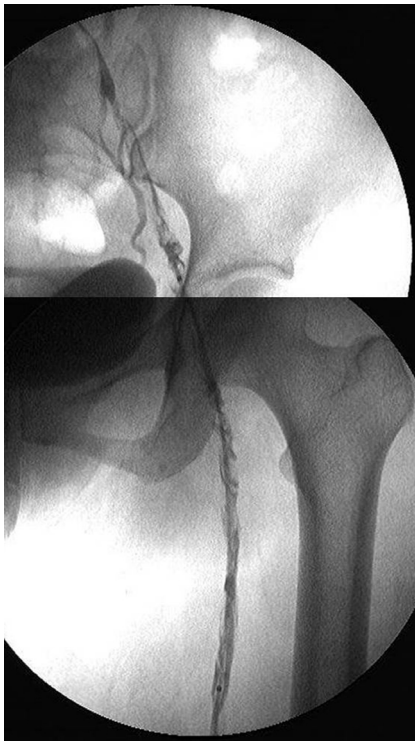
**A.** Initial CT shows enlarged uterus with gestational sac and acute deep vein thrombosis in left iliac vein (arrow). The left iliac vein was more enlarged than right side.

**B.** Initial venogram reveals extensive thrombus in iliofemoral vein.

**C.** Follow-up venogram after catheter directed thrombolysis with 2,200,000 unit urokinase infusion shows nearly total lysis and severe stenosis of left common iliac vein. IVC was well opacified with contrast media by collateral flows.

**D.** Final venogram after aspiration thrombectomy, stent placement, and balloon dilatation shows complete restoration of venous lumen and flow.

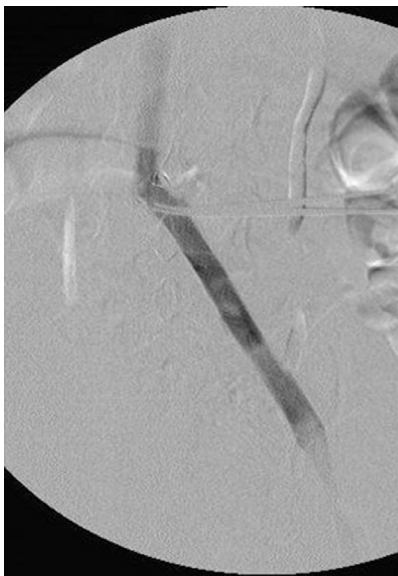
1 . 180 IU coumadin .  
 9 Fr. guiding  
 catheter (Vista brite tip, Cordis, Miami, FL, U.S.A.) . 57  
 (Fig. 2A).  
 5 cm 12 mm × 8 cm Nitis (Fig. 2C).  
 ( , , ) 12 mm  
 (Ultra Thin Diamond, Boston Scientific, Galway, Ireland)  
 (Fig. 2B). 4 12  
 III deficiency), C III (Antithrombin  
 (Protein C deficiency), S



A



B



C



D

**Fig. 2.** 35-year-old early pregnant women with acute deep vein thrombosis in iliac vein compression syndrome.

**A.** Transpopliteal venography shows extensive thrombus in iliofemoral vein.

**B.** Follow-up venogram after catheter directed thrombolysis with 1,800,000 unit urokinase infusion and aspiration thrombectomy with 9 Fr. guiding sheath shows complete lysis and occlusion of left common iliac vein.

**C.** Venogram after placement of Niti-S stent (12 mm × 8 cm) in left iliac vein shows normal venous flow patency of left iliac vein.

**D.** Reformed image of 57 months follow-up CT venogram after catheter directed thrombolysis and stent placement show good venous flow and stent patency of left iliac vein.

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 (Protein S deficiency) , , Krishnamurthy  
 , , (8)  
 (5).

(가 )  
 (2, 6).

가 , 가  
 (2), 가 (5). ,

(2). 2  
 Vora (2) 3 (8) 가  
 34,729 32 (0.1%) 5 2 (7)  
 . 24 (75%) 가  
 1 가 17 (53%) 가  
 2 가 6 , 3 가 9 . 가  
 9 가 . 가  
 3

가

sheath 가  
 (5).

(7, 8).  
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 (7). Krishnamurthy (8)  
 26 28 3  
 ( 2 , 1 )  
 ( 2 )  
 . Acharya (7)  
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## Catheter Directed Thrombolysis for Deep Vein Thrombosis during the First Trimester of Pregnancy: Two Case Reports<sup>1</sup>

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Anticoagulation with heparin has been the standard management therapy of deep vein thrombosis during pregnancy. Pregnancy is generally considered as a contraindication for thrombolysis. However, anticoagulation therapy alone does not protect the limbs from post-thrombotic syndrome and venous valve insufficiency. Catheter-directed thrombolysis, combined with angioplasty and stenting, can remove the thrombus and restore patency of the veins, resulting in prevention of post-thrombotic syndrome and valve insufficiency. We report successful catheter-directed thrombolysis and stenting in two early gestation patients with a deep vein thrombosis of the left lower extremity.

**Index words :** Pregnancy  
Venous thrombosis  
Thrombolytic therapy  
Pregnancy complications, cardiovascular

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