CASE STUDY

Acoustic Pulse Thrombolysis™ Therapy of Chronic Deep Vein Thrombosis (DVT)

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Patient History

65-year-old male who underwent proctectomy and total colectomy developed DVT post-operatively:
- Presented with extensive and extreme swelling in his left lower extremity

Treatment

50cm EKOS™ infusion device inserted, covered entire area:
- Access was obtained through right femoral vein
- IVC filter was positioned below the renal veins
- Left lower extremity venogram showed extensive thrombus from left superficial femoral vein into the left iliac veins, and a combination of chronic and acute thrombus
- EKOS™ Acoustic Pulse Thrombolysis™ therapy along with tPA at 0.5 mg/hour (12.5 mL/hr volume) and heparin (400 units/hour) were delivered

Results

Patient brought back 13.5 hours after EKOS™ device was placed:
- Inferior venacavogram post-EKOS™ lysis confirmed recanalization of the superior femoral vein, common femoral vein and external iliac vein without residual thrombus
- Left common iliac vein required a stent due to chronic stenosis

2 month follow-up:
- Duplex doppler ultrasound 2 months post-EKOS™ showed patent venous system in the left leg and iliac veins
- Patient had no residual swelling or evidence of post-thrombotic syndrome

Pre-EKOS™ - acute and chronic ilio-femoral thrombus
Pre-EKOS™ - extensive superficial femoral thrombus
Post-EKOS™ - complete resolution of acute and chronic thrombus
Post-EKOS™ post-stenting of iliac vein stenosis

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Indications for use: The EkoSonic™ Endovascular System is intended for controlled and selective infusion of physician-specified fluids, including thrombolytics, into the peripheral vasculature. The EkoSonic™ Endovascular System is CE Marked for the treatment of pulmonary embolism with a ≥50% clot burden in one or both main pulmonary arteries or lobar pulmonary arteries, and evidence of right heart dysfunction based on right heart pressures (mean pulmonary artery pressure ≥25 mmHg) or echocardiographic evaluation.

Contraindications:
- Not designed for peripheral vasculature dilation purposes. This system is contraindicated when, in the medical judgment of the physician, such a procedure may compromise that patient's condition. Such conditions include but are not limited to:
  - Tortuous vascular anatomy compromising safe introduction of endovascular equipment
  - Conditions associated with increased risk of bleeding.

See device instructions for use for complete prescribing information.

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