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## Complete Lysis of Bilateral DVT in Femoral Veins

### Patient History

56-year-old male bedridden from debilitating bilateral lower extremity swelling and DVT.

- Angiography confirmed the presence of occlusive thrombus in the both the right and left lower extremities, the pelvis, and the IVC filter.
- On the right, the thrombus in the femoral vein extended from the popliteal vein through the pelvis and into the IVC filter.
- On the left, the profunda vein exhibited some thrombus that extended back through the common femoral vein and through the pelvis. Pelvis was occluded.

### Treatment

Access was obtained through the right internal jugular vein.

- A 50cm treatment zone EKOS EkoSonic™ Endovascular Device (135cm working length) was placed through the IVC filter and through the length of the right femoral vein.
- A simple side-hole catheter was placed in the left femoral vein across the occluded pelvic segment.
- 3000 units, IV bolus Heparin.
- rtPA was infused through both the EKOS and side-hole catheter at 1mg/hr, (per catheter) for 6 hours, then 0.5mg/hr, per catheter for 24 hours.

### Midpoint Results

After 30 hours of treatment and 18mg rtPA in each catheter:

- The right side, treated by the EKOS catheter, showed flow restoration throughout the femoral vein, and some improvement in the pelvic vein. The IVC filter was still occluded.
- The left side, treated with a simple infusion catheter, showed little improvement.
- Due to more improvement on the right than on the left side, it was decided to remove the side-hole catheter and transfer the EKOS catheter from the right side to the left, and resume treatment with ultrasound and rtPA infusion at a continued rate of 0.5mg/hr only on the left side.

### Final Results

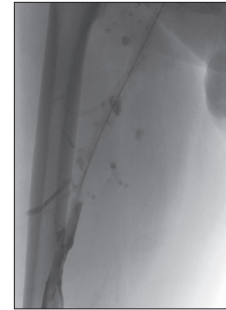
After an additional 18 hours and 9mg of rtPA on the left side:

- Flow was restored through the left pelvic vein (now the EKOS side). A residual stenosis in LCFV was angioplastied.
- Brisk flow was restored in both the right femoral and pelvic veins, as well as through the IVC filter. A narrowing in RCFV was angioplastied.

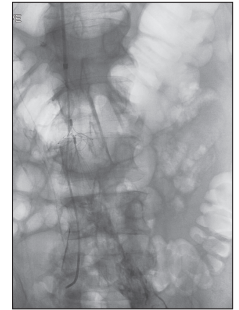
“The EKOS catheter was able to restore flow through extensive femoral and pelvic vein occlusive thrombus upon which a standard infusion catheter had no effect.”

– Karl Weingarten, MD

#### Pre Photos

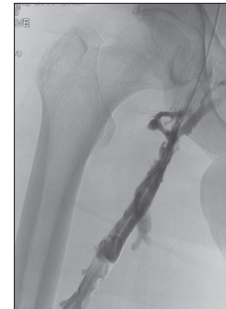


Thrombus in Right femoral vein

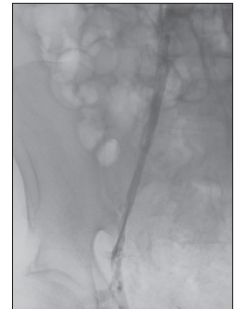


Thrombus in Left Pelvis

#### Mid-Term Results



Flow restored in right femoral vein (EKOS treated side)



Some flow in Right Pelvic vein



No improvement in left pelvic vein

#### Final Results



Brisk flow through right pelvic vein and IVC filter



Brisk flow through left pelvic vein



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