

**KARL WEINGARTEN, MD**

University Hospital, Augusta, GA

## Complete Lysis of Bilateral DVT in Femoral Veins

### Patient History

56yo male bedridden from debilitating bilateral lower extremity swelling and DVT

- Angiography confirmed presence of occlusive thrombus in both the right and left lower extremities, pelvis, and IVC filter
- On the right, 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.

### Treatment

Access was obtained through the right internal jugular vein.

- A 50cm treatment zone EKOS® 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

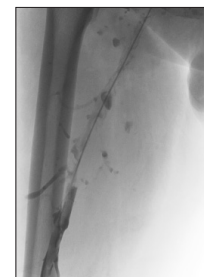
- Flow was restored through the left pelvic vein (now the EKOS® side). A residual stenosis in LCFV was angioplastied
- Brisk flow was restored in both the right femoral and pelvic veins, as well as through the IVC filter. A narrowing in RCFV was angioplastied

*"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."*

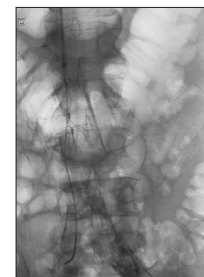
- Karl Weingarten, MD

# EKOS®

#### Pre Photos



Thrombus in right femoral vein

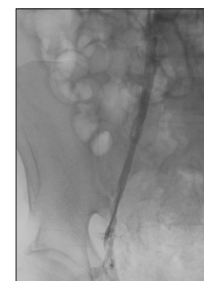


Thrombus in left pelvic vein

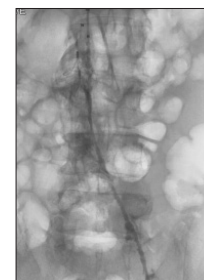
#### Mid-Term Results



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



**FDA CLEARED INDICATIONS:** The EkoSonic® Endovascular System is indicated for the ultrasound facilitated, controlled and selective infusion of physician-specified fluids, including thrombolytics, into the vasculature for the treatment of pulmonary embolism; the controlled and selective infusion of physician-specified fluids, including thrombolytics, into the peripheral vasculature; and the infusion of solutions into the pulmonary arteries. Instructions for Use, including warnings, precautions, potential complications, and contraindications can be found at [www.ekoscorp.com](http://www.ekoscorp.com). Caution: Federal (USA) law restricts these devices to sale by or on the order of a physician. EKOS® and EkoSonic® are registered trademarks of EKOS Corporation, a BTG International group company. Acoustic Pulse Thrombolysis is a trademark of EKOS Corporation. BTG and the BTG roundel logo are registered trademarks of BTG International Ltd. © 2015 EKOS Corporation • US-EKO-2015-0431

**EKOS CORPORATION**  
11911 N Creek Pkwy S.  
Bothell, WA 98011