

## **Acoustic Pulse Thrombolysis™ Treatment Enables Fast, Very Low Dose Clearance of Large Thrombus in Iliac Stent Graft**



### **Patient History**

73-year old male with acute right leg pain at rest following elective endovascular aneurysm repair (EVAR) two days prior. Bilateral surgical access for the EVAR was obtained through the femoral arteries. An endovascular stent graft was deployed within the aorta, with the bifurcated graft portion implanted within the common iliac arteries

- Ultrasound confirmed an 18 cm long occlusive thrombus inside the right branch of the iliac stent-graft

### **Treatment**

24cm (106cm working length) EKOS® device

- Access was obtained through the left humeral artery
- Catheter was placed into the right iliac stent-graft thrombus and positioned so that the catheter did not extend beyond the distal end of the graft
- 100,000 bolus of Urokinase and 5000 IU Heparin IV
- Urokinase was infused through the EKOS® device at 50,000 IU/hr for 3 hours

### **Results**

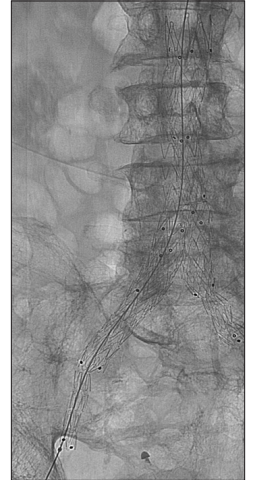
After 3 hours of treatment and 250,000 IU Urokinase

- Complete recanalization of the occluded vessel
- With the clot resolved, an abdominal aortogram revealed stenosis in the right iliac artery due to kinking of the stent graft. It also showed evidence of external iliac artery and common femoral artery dissection at the surgical access site
- Subsequent balloon dilation of the right stent graft (12 mm PTA balloon) and common femoral artery (7 mm PTA balloon), and placement of an additional stent within the external iliac artery resolved the stenosis and sealed off the dissection

*“Use of the EKOS® device enables safe, low dose treatment of occlusive thrombus in situations such as post femoral arteriotomy where risk of hemorrhagic complications is high.” – Nicola Limbucci, MD*



*CT showing occluded right branch of iliac artery and stent graft from EVAR*



*Placement of EKOS® catheter through stent graft into clot*



*Complete clot resolution after three hours of treatment revealed stenosis from kinked stent graft and dissection of EIA*

