CASE STUDY

EKOS

Fast relief of SVC Syndrome Symptoms with Acoustic Pulse Thrombolysis™ Treatment

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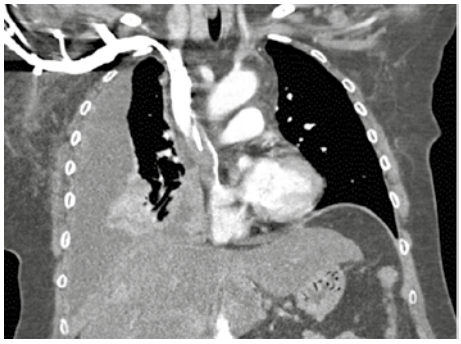
Patient History

52yo female presented with acute Superior Vena Cava Syndrome (symptoms began 24 hours prior). Treatment for metastasized breast cancer in 2009 included placement of a right subclavian vein port catheter for chemotherapy. History of cerebral hemorrhage in 2005; DVT and atrial fibrillation in 2009:

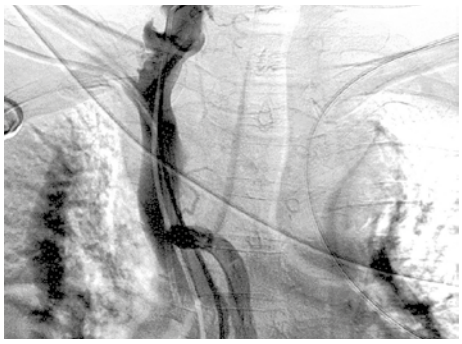
- CT Angiography confirmed the presence of a 9cm long occlusive thrombus in the superior vena cava with involvement of the right atrium and subclavian vein-port catheter



CT showing occluded Superior Vena Cava with subclavian vein port catheter.

Treatment

- Access was obtained through the femoral vein
- A 12cm (106cm working length) EKOS™ device was placed across the thrombus
- 5000mg bolus of heparin and 5mg bolus of Actilyse (alteplase)
- Actilyse was infused through the EKOS™ device at a rate of 1mg/hr for 18 hours



Occluded Superior Vena Cava with collateral drainage via azygos vein

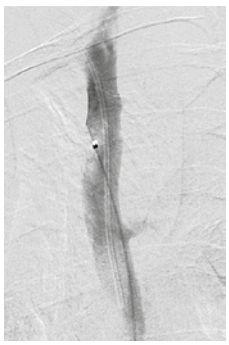
Short Term Results

- Patient had significant relief of symptoms after only two hours of treatment

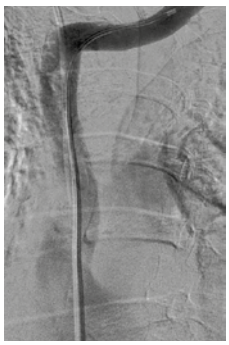
Final Results

After 18 hours of treatment and 23mg Actilyse:

- Angiography showed some restoration of flow, with residual stenosis in SVC
- Subsequent balloon dilation (14 x 40 mm PTA balloon) resulted in excellent flow



Flow restored in SVC with residual stenosis



Brisk flow through SVC

"With the incidences of upper extremity DVT rising due to the increased use of central venous catheters for chemotherapy and other treatments, new effective treatment options are needed. Treatment with the EKOS™ device rapidly improved patient symptoms, and restored excellent flow."

– Kulbir Singh, MD

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