INTERVENTIONAL TREATMENT OF IlioFemoral and CAVAL DVT IN THE OFFICE BASED LAB

Jeffrey Wang MD
Horizon Vascular Specialists

Disclosures
- WL Gore speaker
- BSCI Proctor
- CSI Advisory Board

Horizon Vascular Specialists
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- 4 Vascular Surgeons
- Cover 3 hospitals
- Have 4 offices
- Outpatient Based Lab
- Germantown, Maryland Suburb of Washington DC
- Open for the last 8 years
- Owned entirely by HVS
- Average 97 cases a month past 12 months (Angiosuite only)
Case MIX

- Dialysis
  - 20% Inclusive of secondary dialysis interventions and catheter management
- Peripheral Arterial
  - 50%
  - Lower extremity diagnostic and intervention
  - Visceral diagnostic and intervention
  - Diagnostic cervical and cerebral
- Venous
  - 30%
  - IVC filter insertions and removals
  - Deep venous interventions

OBL Start up Supplies

- Interventional Supplies
  - Larger Balloons Stents
  - IVC Filters
  - AngioJet Thrombectomy System or some other thrombectomy device
  - Lytic Catheters
- Patient Care Supplies
  - Anti-emetics
  - Anti hypertensives
  - IV Pumps
  - TPA

Staff Training

- Prone Position
- Understanding Heparin and TPA
- Awareness of patient care concerns
- Reinforcing education to patient

Logistics of Thrombolytics

- Obtaining TPA
- Understanding supply chain
- Staff Education
- Cost
- Storage
**Patient Education**

- Awareness of patient concerns
- Hemoglobinurea
- Education of patient on complications
- Education of patient on logistics of anticoagulation

**Office Based Venous Thrombectomy**

- First session Power Pulse® Delivery in concentrated TPA. Place infusion catheter
- Take pt to holding area
- Wait minimum 1.5 hour (in practice one or two other cases)
- Second session mechanical thrombectomy with secondary intervention.
- Pt discharged 2 hours after
- Total time 6-8 hours

**Disadvantages**

- Higher materials cost
- Patient concerns
- Bleeding
  - Hemoglobinurea (Brown or Red Urine)

**HPI**

- 62 yo male presents with left leg swelling for 2 days
- Pt is a smoker, not diabetic
- Pt has HTN and high cholesterol
- Pt is a building inspector
- Pt presents to the office for evaluation
- U/S shows extensive DVT extending thru the iliac vein
- Pt started on Xarelto and arrangements were made for a dvt thrombectomy
Clotted IVC
- 55 yo vietnam war vet
- Left AKA
- Massively swollen leg
- Can’t walk
- Can’t use prosthesis
Results

- 10 patients (6 female) were treated in OBL using AVT
- The mean age was 49.4 years (range 27-82 years)
- Complete primary resolution of thrombus was achieved in 10% of patients
- Percutaneous mechanical thrombectomy was required in 9 patients (90%)
- Angioplasty in 10 patients (100%)
- Stenting in 8 patients (80%).

Results

- Technical success (inline flow) was achieved in all patients
- All patients were discharged on the same day of treatment
- There were no bleeding complications and no episodes of renal failure
- All patients were placed on long term anticoagulation (6-12 months)
- Primary patency in 9 patients (90%) at mean follow up of 12 months (range 8-18 months)
- There was 1 re-thrombosed vein, which underwent repeat AVT and is still patent. This was due to non-compliance with the anticoagulation regimen

Summary

- Thrombectomy for iliofemoral DVT is possible in the OBL
- Both thrombectomy and secondary intervention are equally important.
- Office based dvt treatment is safe, effective, and in many ways preferable to inpatient thrombolysis