Acute Retroperitoneal Hemorrhage from Recanalization of Chronically Occluded Iliac Vein

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Disclosure

Speaker name:

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I have the following potential conflicts of interest to report:

- [x] Consulting
- [ ] Employment in industry
- [ ] Stockholder of a healthcare company
- [ ] Owner of a healthcare company
- [ ] Other(s)

- [ ] I do not have any potential conflict of interest
Case Presentation

33 yo Female – s/p Lap Peritoneal Stripping

- Post-op developed R Ileofemoral DVT
- Presented w/3 Month Right Ileofemoral DVT
- Severe Right Leg Swelling
- Post-Phlebotic Syndrome – Vallalta 14
  - Unable to stand for more than 20 min despite compression stockings
- Also has Left Leg Swelling with some discomfort
Case Presentation

Venous Duplex

- Occluded Right Iliac and Common Femoral Veins with extension into proximal femoral vein

- Left side shows no DVT
Case Presentation

Cath Lab
- General Anesthesia
- Prone Position
- Bilateral Popliteal Vein Access
Right Ileo-Femoral Venogram
Case Presentation

Right Ileo-Femoral Venogram

- Occluded Right Common and External Iliac Veins with extension into the common femoral vein
- Unable to cross Iliac vein from Antegrade access

Left Popliteal access with Ileo-Femoral Venogram
Left Ileo-Femoral Venogram
Ileo-Caval Venogram
Case Presentation

- Able to Cross Occluded Right Iliac Vein from up-and-over access using an Aptus Sheath
- Used Snare to pull wire through Right Popliteal sheath
- Venogram and IVUS confirmed intraluminal access
Case Presentation

- Pre-Dilated Right Iliac Vein with 5mm, 12mm, and 16mm balloons
- Placed 16mm Wallstents to Right Common and External Iliac veins that extended into the Common Femoral vein
- Also Placed 16mm Wallstents to Left Common Iliac Veins
Case Presentation

-Anesthesiologist then asks the question that all interventionalists fear

“Uhhh.... Are you guys doing something?”

-BP dropping precipitously ...
  - SBP 60mmHg, HR 130’s
-Immediately shot a venogram
Case Presentation

-Immediately place a 16mm Atlas balloon for occlusion...
Case Presentation

- Immediate resuscitation through Left Popliteal Venous 11Fr. Sheath
  - Trauma Rapid Infuser
  - 2u PRBC
- Balloon held for 35 minutes...
- BP stabilized
- Repeat Right Ileo-Femoral Venogram
Case Presentation

- 2 Options

  1) Occlude Right Iliac Vein stents with Amplatzer plugs and coils
  2) Place covered stent

- Placed a 16x16x82mm Iliac limb stent graft through popliteal vein access
  - Thankfully she was short enough that the delivery system reached the Iliac Vein
Case Presentation

- Discharged from hospital on POD#7 with stable Hgb levels
- Lifelong Anticoagulation
- Post-phlebotic syndrome significantly better
- Continues to wear compression stockings
- Venous duplex shows Iliac Vein Stent graft still patent 18 months later
Questions

Why did the Iliac Vein Rupture?
- Wait longer than 3 months post-DVT?
- Gentler balloon inflation?

Other options to treat an Iliac Vein Rupture?

Hopefully there won’t be a next time...
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