Double barrel stent technique for treating chronic IVC occlusion

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Disclosure

Speaker name:

I have the following potential conflicts of interest to report:

☐ 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
Causes of IVC occlusion

• **Infrarenal part**
  - DVT
  - Filter occlusion
  - Malignancy

• **Suprarenal part**
  - Malignancy
  - Retroperitoneal fibrosis
  - Propagation of DVT

• **Retro/suprahepatic**
  - Aplasia
  - Malignancy
  - Budd-Chiari syndrome

• **General causes**
  - ex. Thrombophilia
Presentation of IVC occlusion

- Silent
- Symptomatic
  - Acute (DVT)
  - Chronic (pain, ulcer,..)
Case presentation

- Male 31 years old
- Extensive Rt iliofemoral DVT
- Thrombophilia scan
- Diagnostic work up
  - Duplex ultrasound
  - CTV
CDT procedure

- CDT was done,
- Pop access
- Alteplase 1 mg/h
- After 48h lysis, IVC occlusion up to suprarenal part.
Initial imaging pre thrombolysis
Completion venogram after lysis
IVC stenting technique

- **Position:** prone
- **Anesthesia:** general
- **Access:** bilateral Pop vein
- **Sheath:** 8F
- **IVUS:** assessment of inflow/outflow segments
- **Balloon:** 8 and 14 mm Atlas balloon (Bard., USA)
- **Stent:** six 14mm Zilver Vena stents (Cook, USA), double barrel pattern, IVUS guidance
IVUS assessment

Healthy vein                                   Diseased vein
Pre-dilation
Stent deployment
Post stent dilation
Stent assessment with IVUS
Completion Venogram
Post op.

- Warfarin for 1 year (INR 2-3)
- Clopidogrel for 6 weeks.
- 75 mg aspirin indefinitely
- Pneumatic compression
- Elastic stocking
- Duplex (2W, 6W, 3M, 6M, annual)
Conclusions

- Double barrel stent technique for treating chronic IVC occlusion is safe and feasible.
- IVUS is very important before and after stent deployment inside IVC.
- Long term follow up is required for better assessment of patency.
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