

Double barrel stent technique for treating chronic IVC occlusion



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Disclosure

Speaker name:

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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)
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- 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.

Intial imaging pre thrombolysis



Completion venogram after lysis



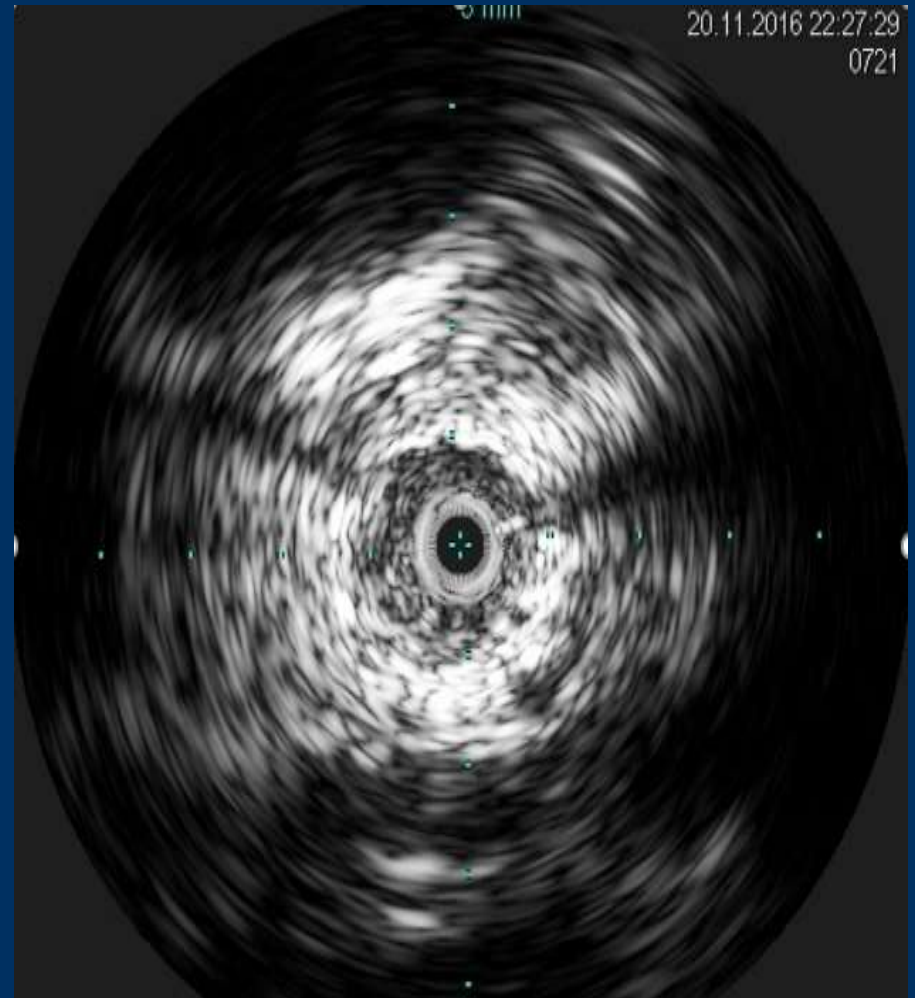
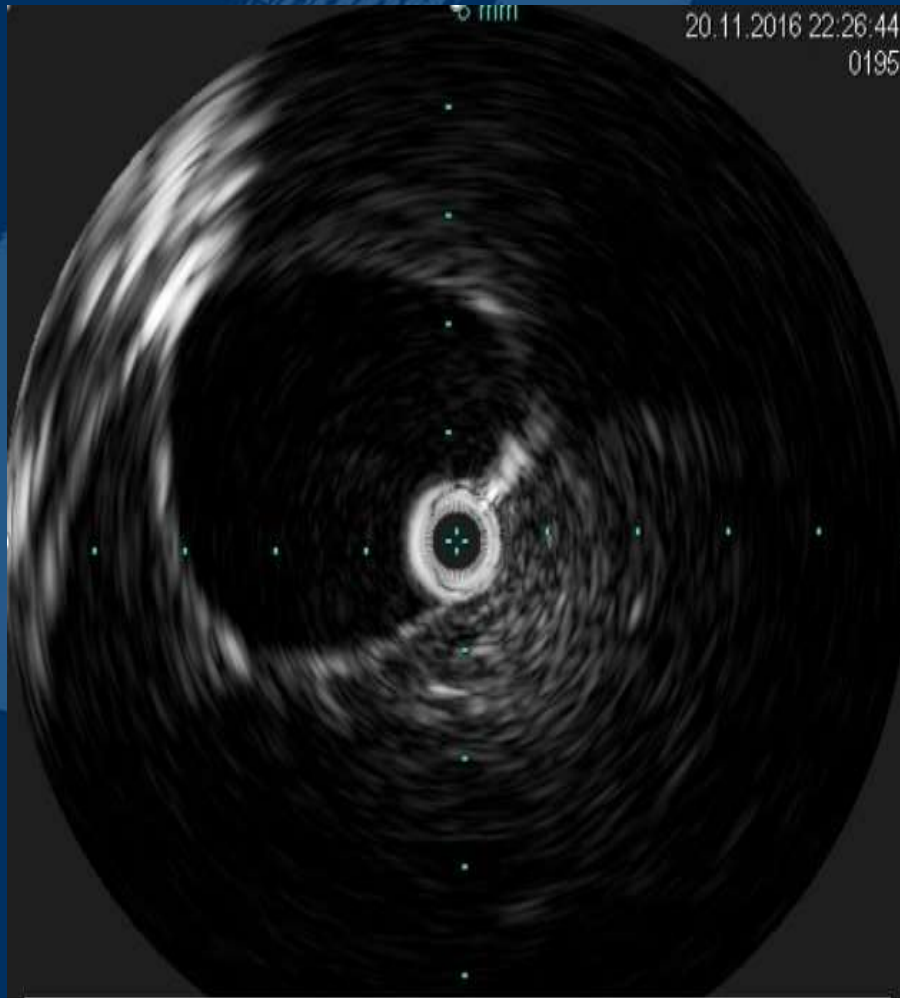
IVC stenting technique

- **Position:** prone **Anesthesia:** general
- **Access:** bilateral Pop vein **Sheath:** 8F
- **IVUS:** assesment 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

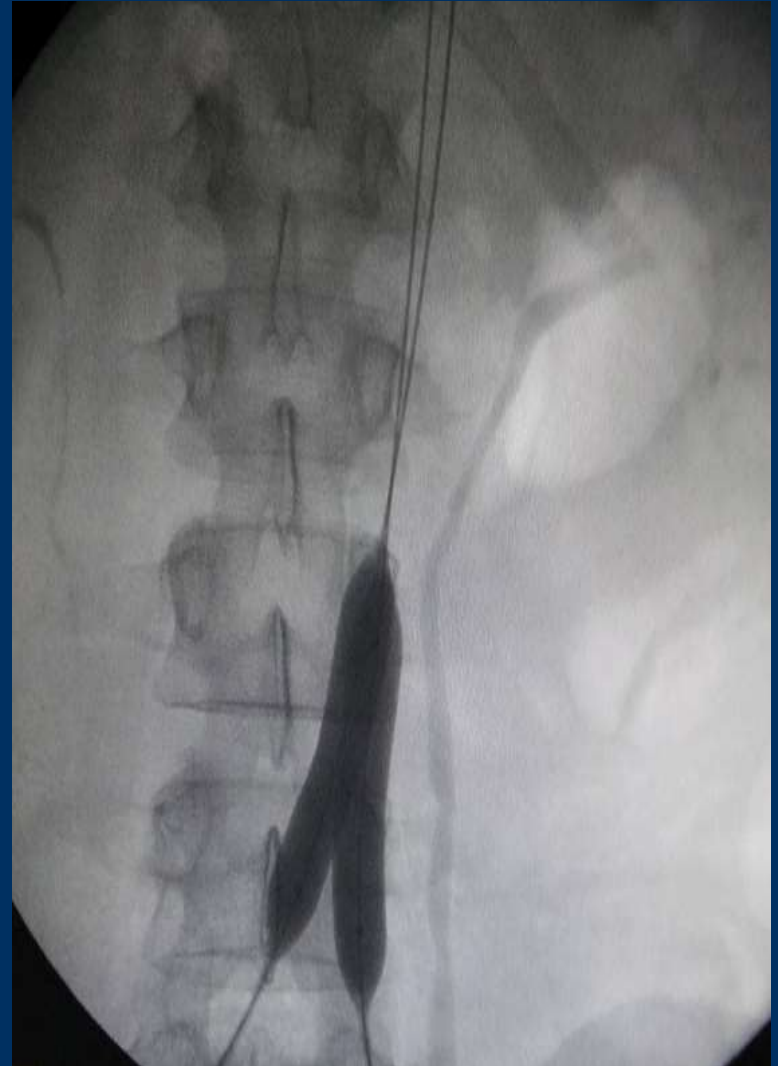
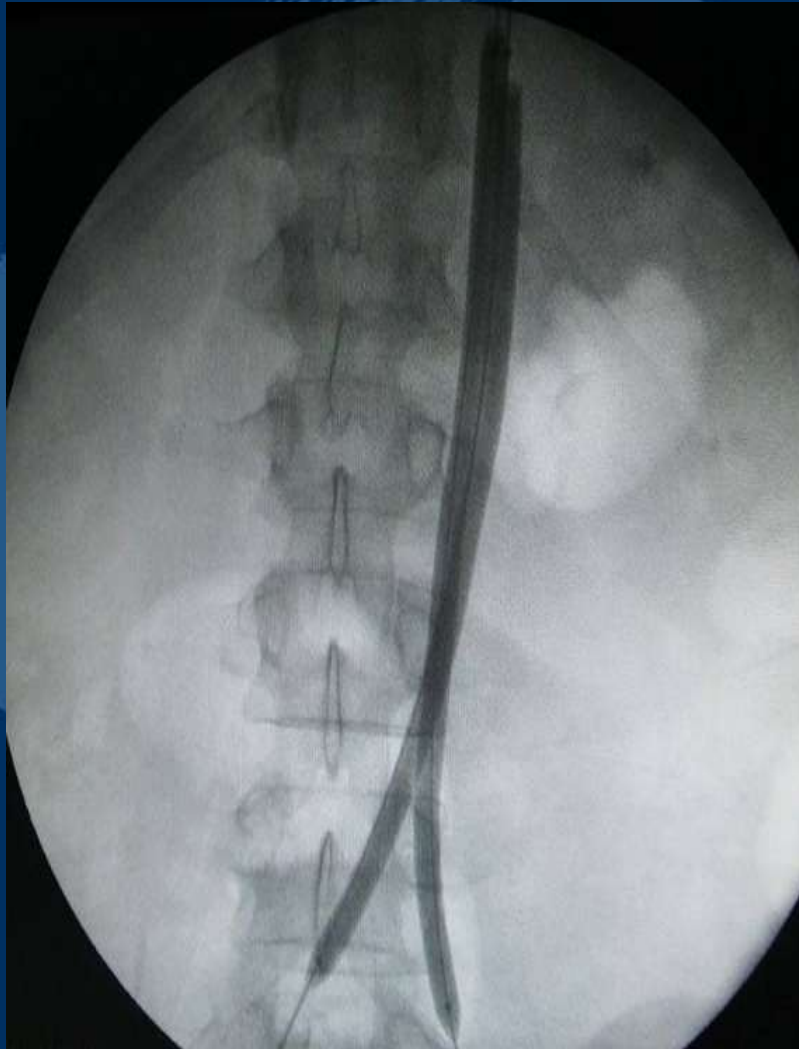
IVUS assessment

Healthy vein

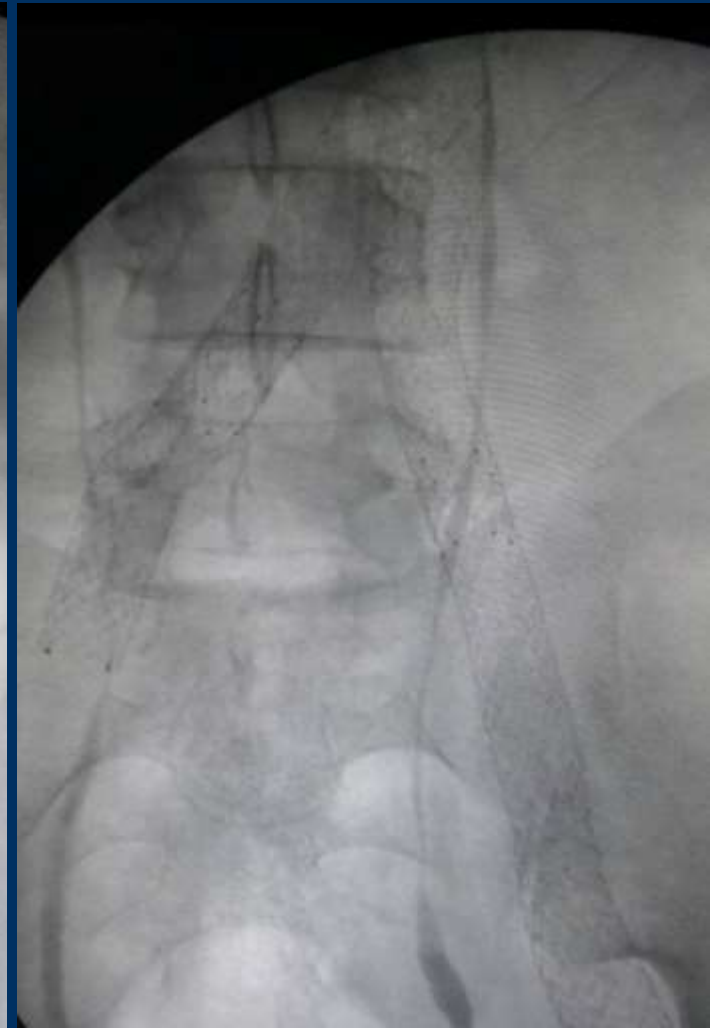
Diseased vein



Pre-dilation



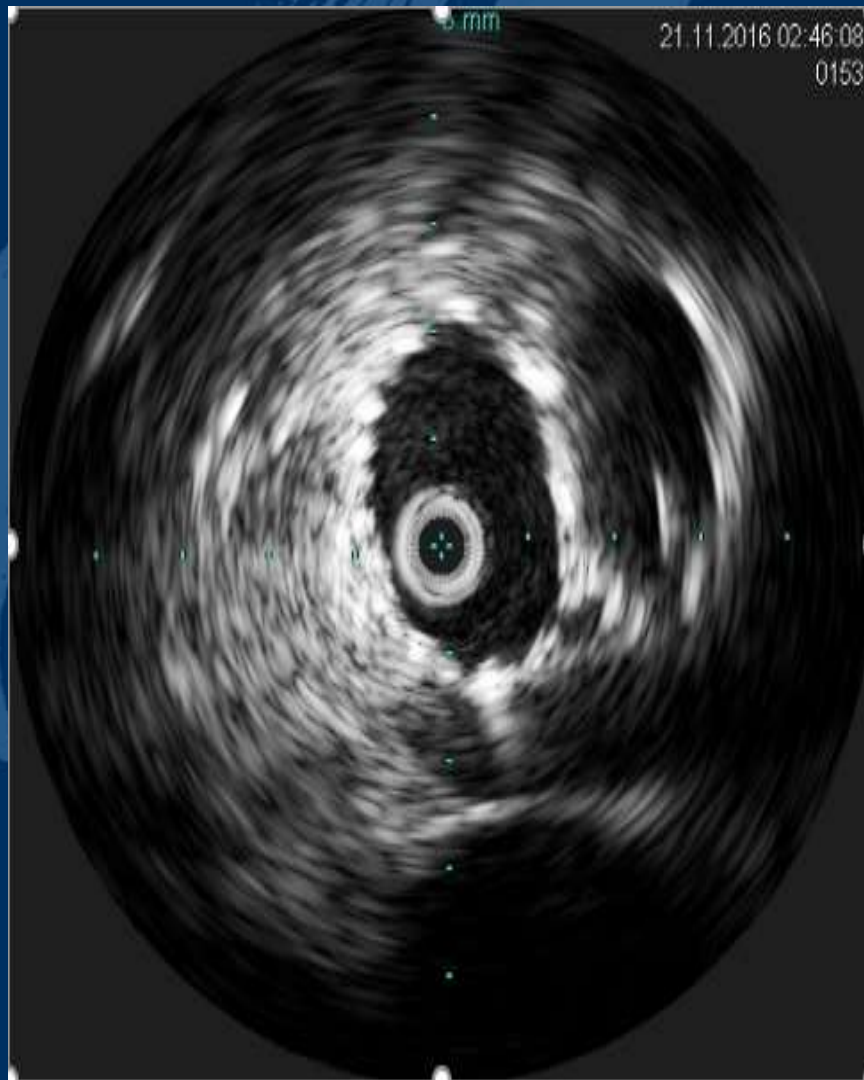
Stent deployment



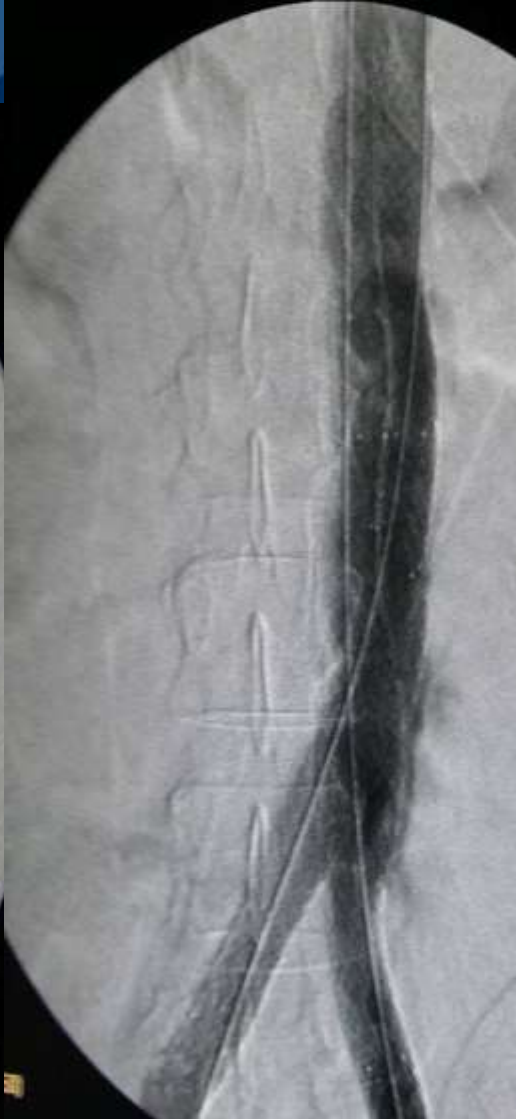
Post stent dilation



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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