

CONTROVERSES  
ET ACTUALITÉS EN CHIRURGIE VASCULAIRE



# CONTOVERSIES & UPDATES IN VASCULAR SURGERY

**JANUARY 21-23 2016**

## ***10 rules to respect to ensure the success of: chronic deep-vein obstruction treatment***

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DVRS Club  
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# FINANCIAL RELATIONSHIP DISCLOSURE:

## Commercial Interests

*I declare the following commercial interests:*

- Jotec Srl
- Volcano Europe BVBA
- BSCI
- Servier International
- Covidien

***I declare that my presentation will  
not include commercial contents***

- 1 do define the etiology of obstruction
- 2 be sure that the inflow is adequate
- 3 do define lesion extent, location and features
- 4 do plan the procedure
- 5 do provide adequate analgesia
- 6 be sure to be able to manage complications
- 7 do provide intraoperative anesthesia assistance
- 8 do apply the correct technique
- 9 do schedule a control within 2 weeks
- 10 do consider to treat deep reflux if needed

**10 rules for vein obstruction treatment success!!**

1

**do define the etiology of obstruction**

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**be sure that the inflow is adequate**

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**do consider to treat deep reflux if needed**

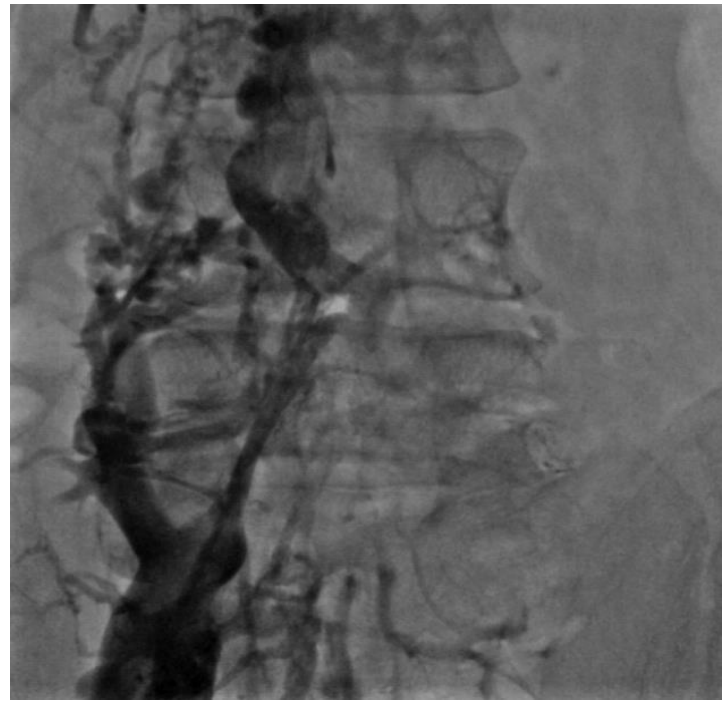
## PRIMARY

May-Thurner syndrome  
*Non-thrombotic iliac vein lesions (NIVLs)*



## SECONDARY

*post-thrombotic syndrome (PTS)*



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## 2 be sure that the inflow is adequate

the inflow is the fundamental hemodynamic element in outflow obstruction treatment

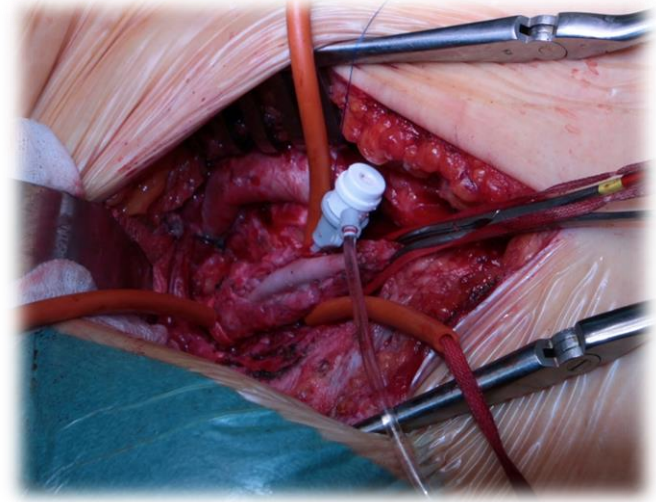
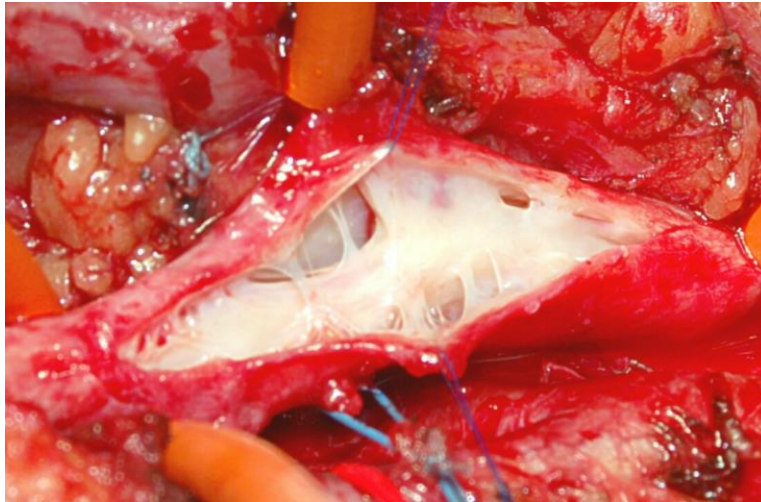
the common femoral and the deep femoral confluence are crucial areas





## 2 be sure that the inflow is adequate

do consider endophlebectomy and hybrid procedures



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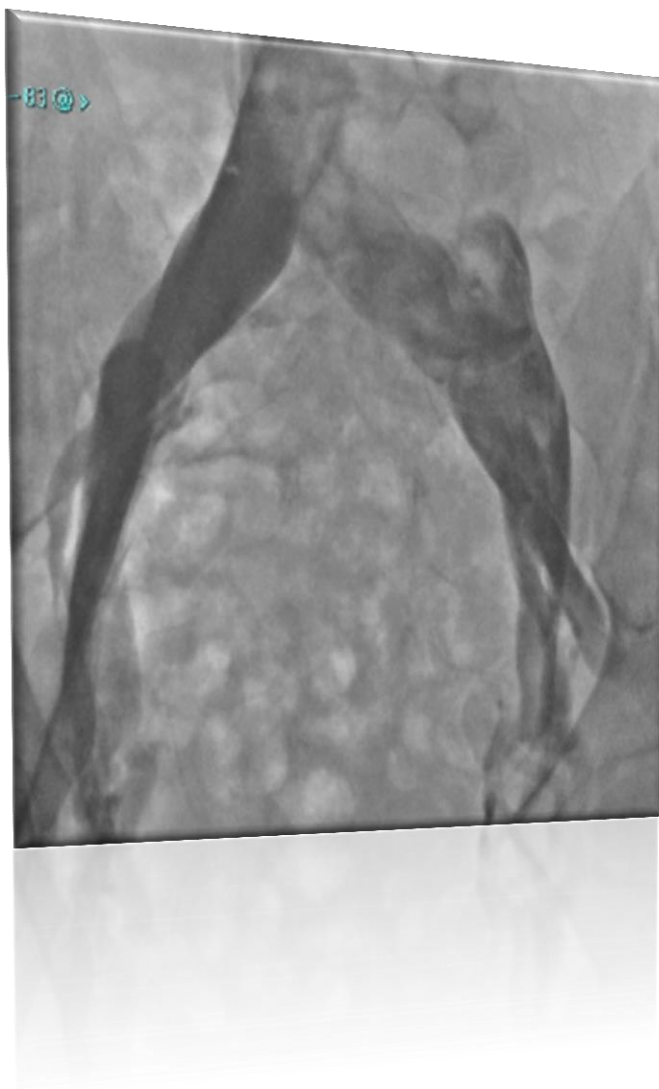
10

**do consider to treat deep reflux if needed**

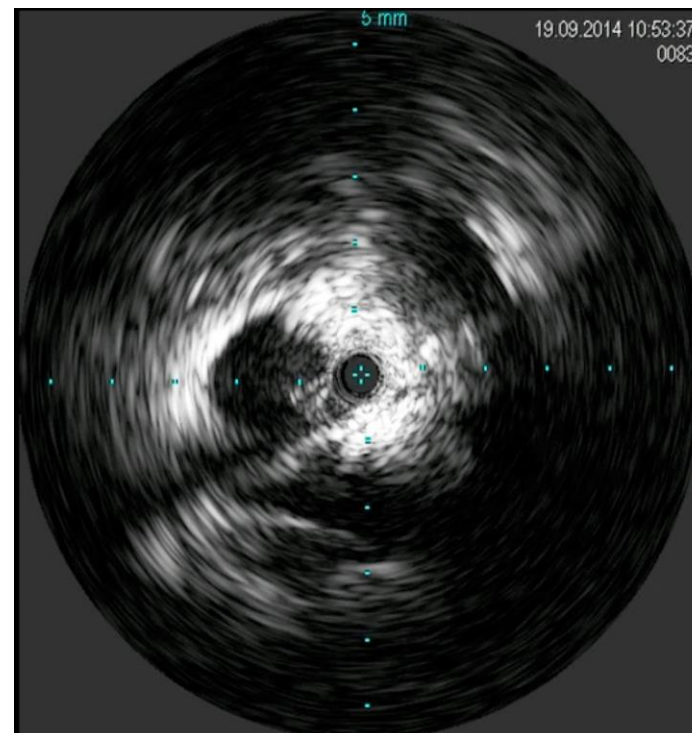
do provide an exhaustive diagnostic imaging  
in order to obtain  
precise lesion topography and  
morphologic description.

3

## do define lesion extent, location and features

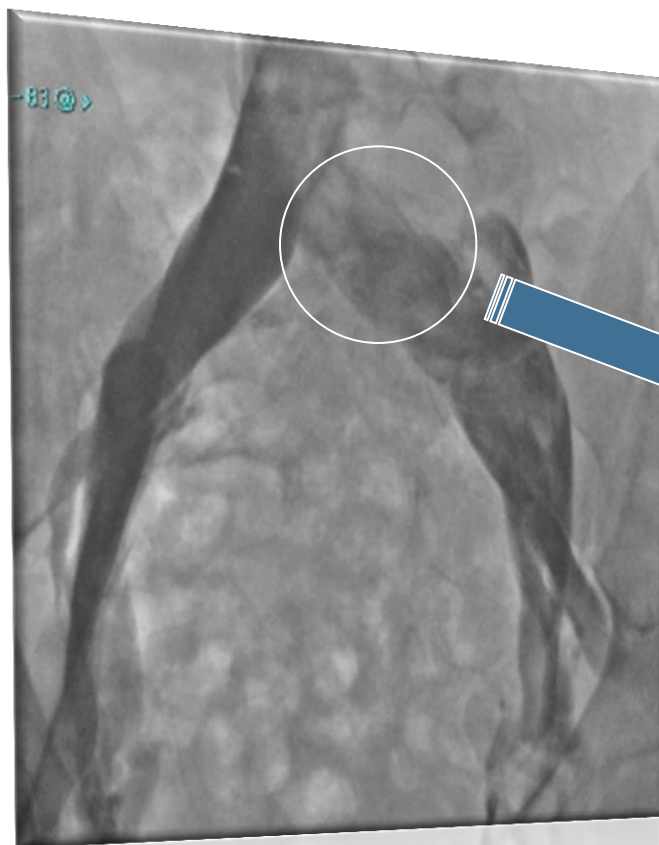


## NIVL assessment

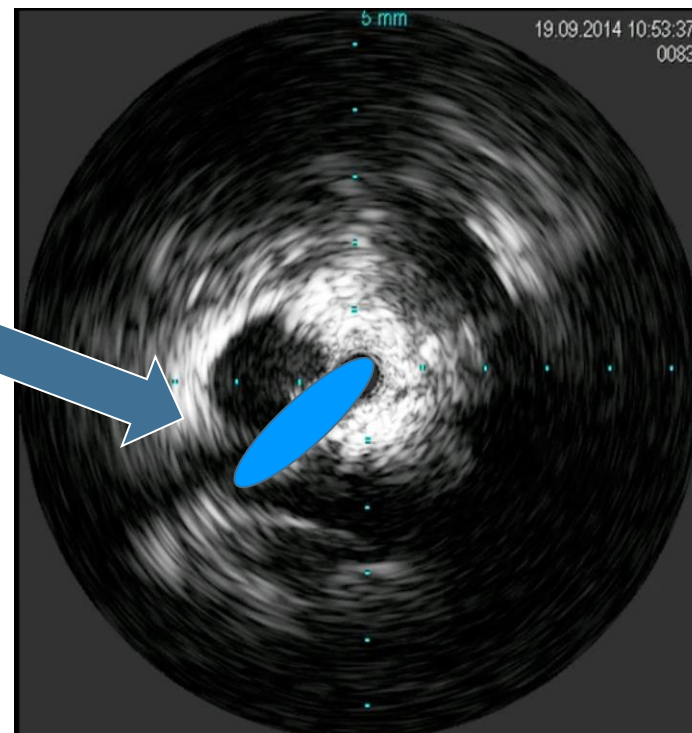


3

## do define lesion extent, location and features



### NIVL assessment

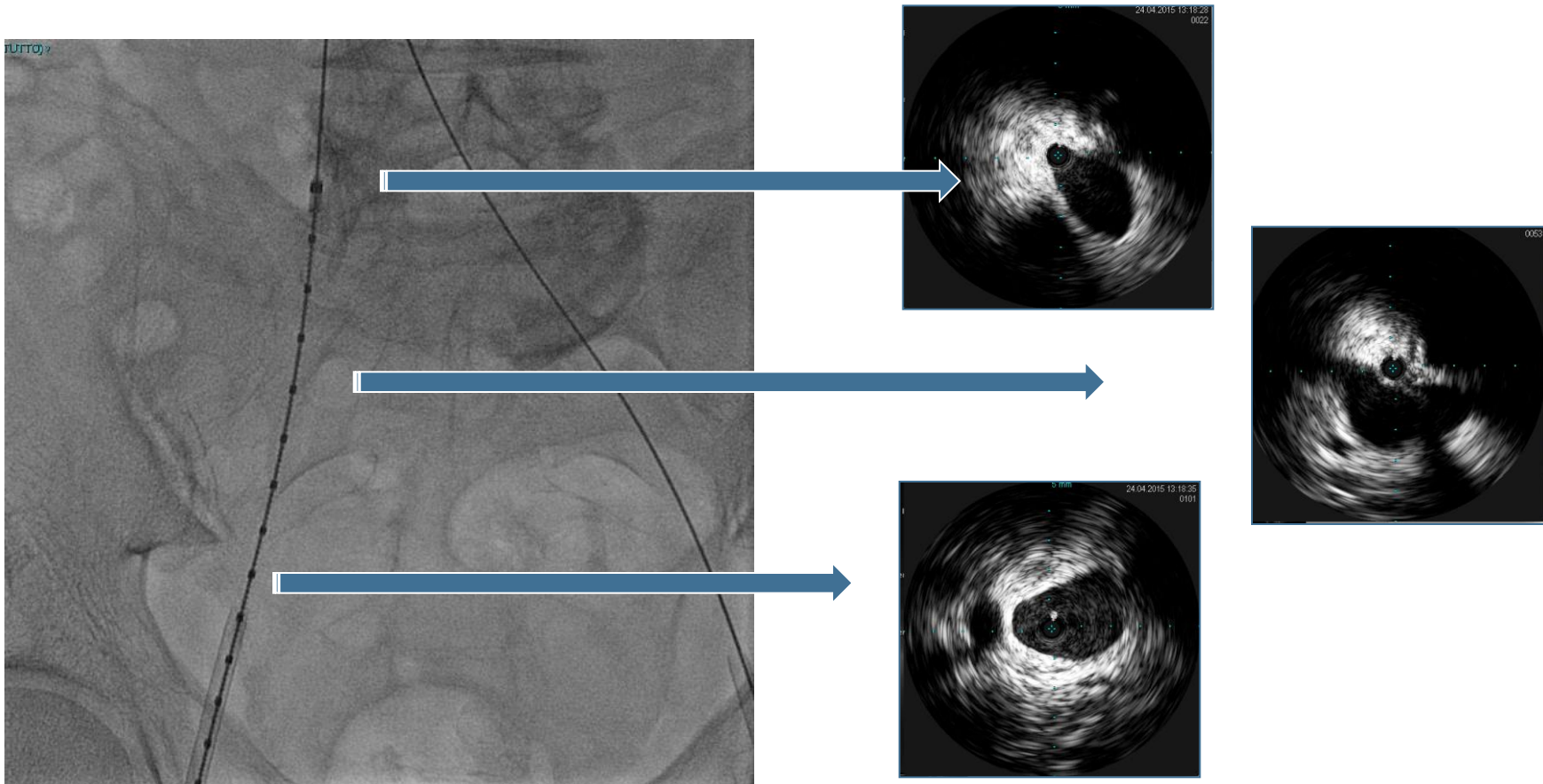




3

## do define lesion extent, location and features

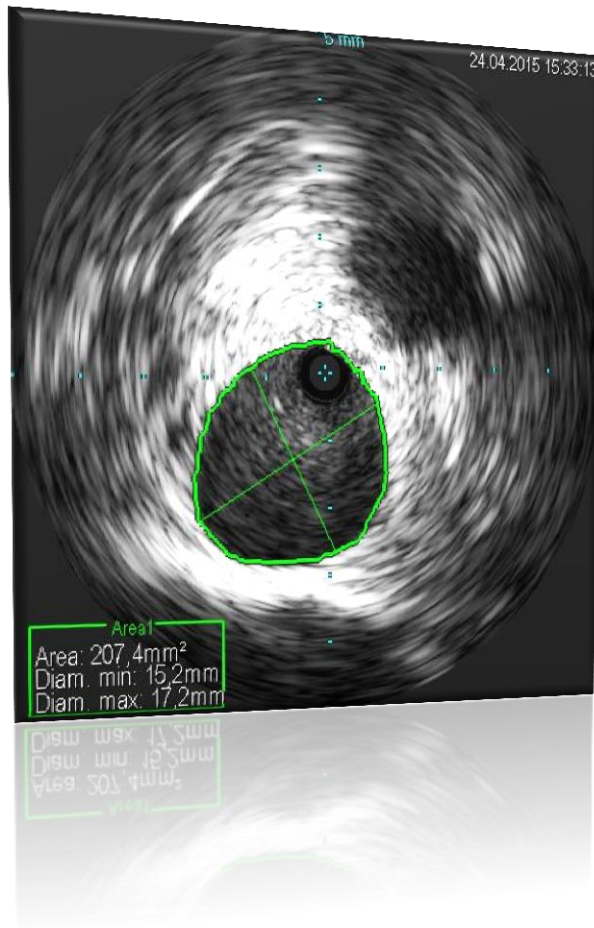
### PTS assessment



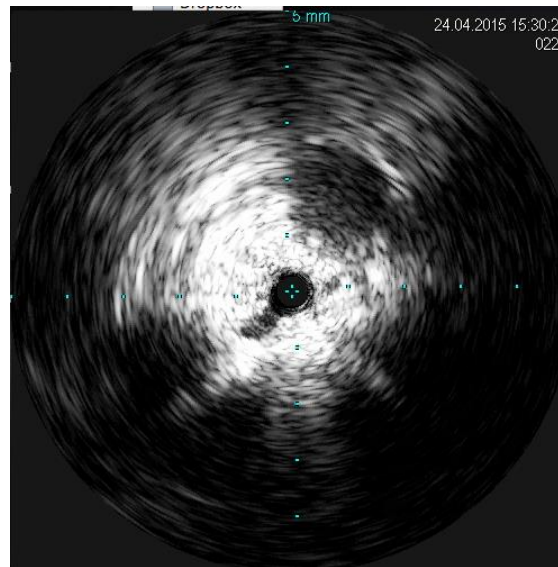
3

## do define lesion extent, location and features

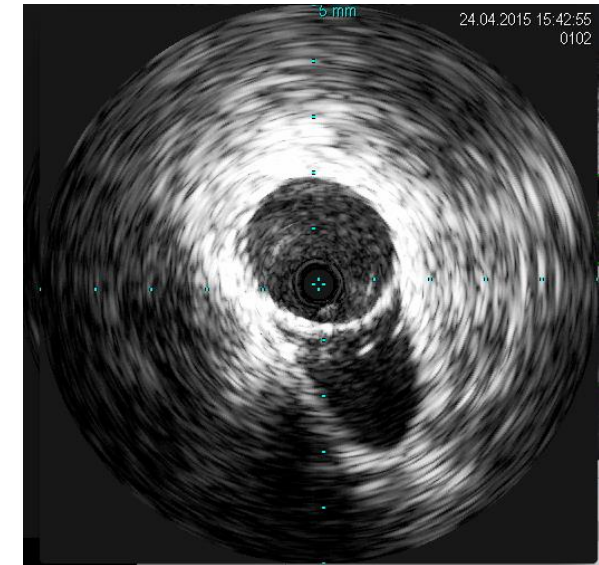
reference vessel



stenosis



final result





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**He who fails to plan is planning to fail**

*Winston Churchill*

- patient position: supine or prone
- catheter sites selection
- do verify coagulation and ongoing therapies

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## 5 do provide adequate materials/equipment

- **Ultrasound guidance**
- **IVUS**
- **ICP** (intermittent pneumatic compression)

## 5 do provide adequate materials/equipment

- hydrophilic wires
- gliding catheters
- high-pressure balloons
- stents: large diameters  
“venous dedicated??”

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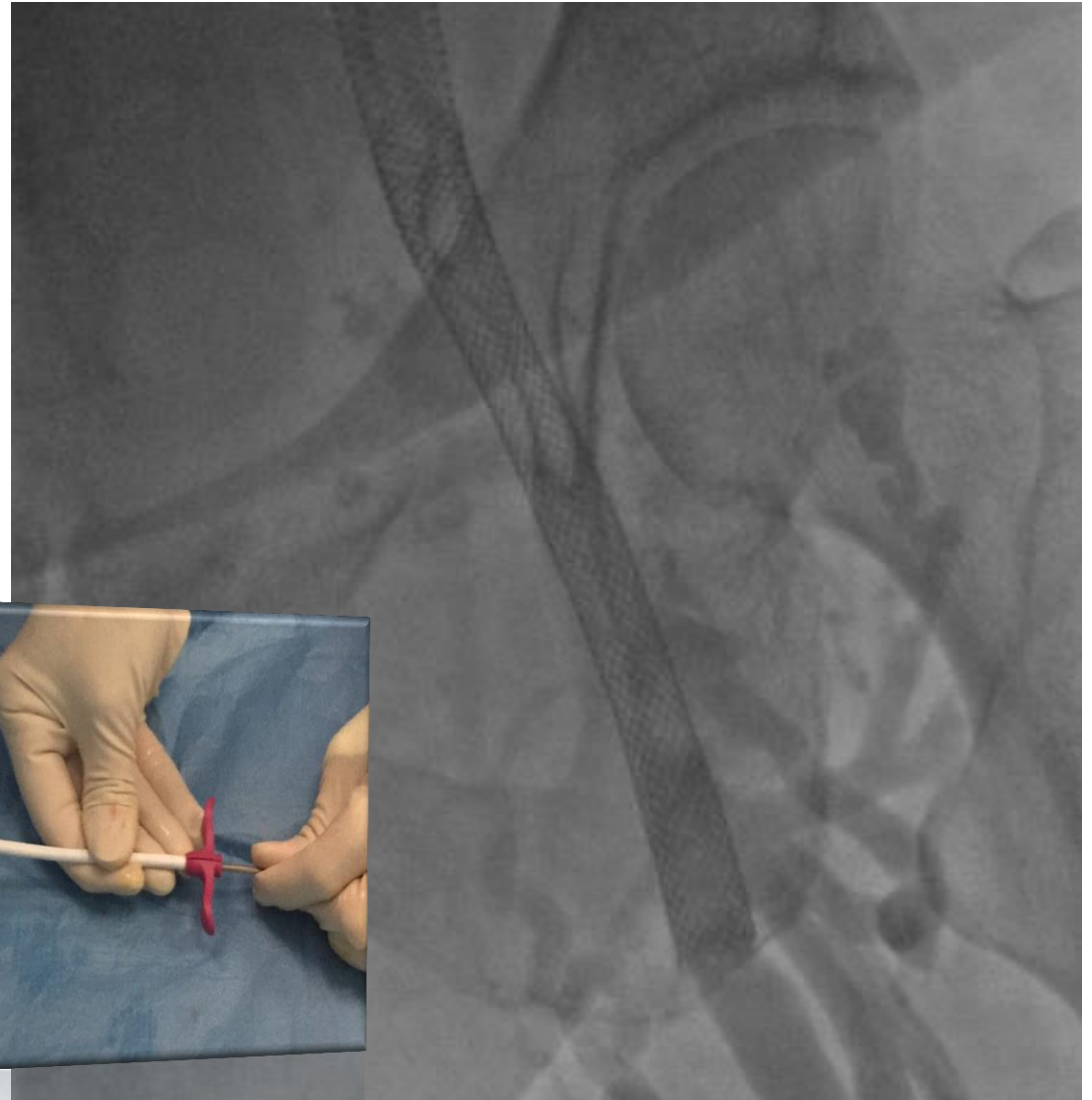
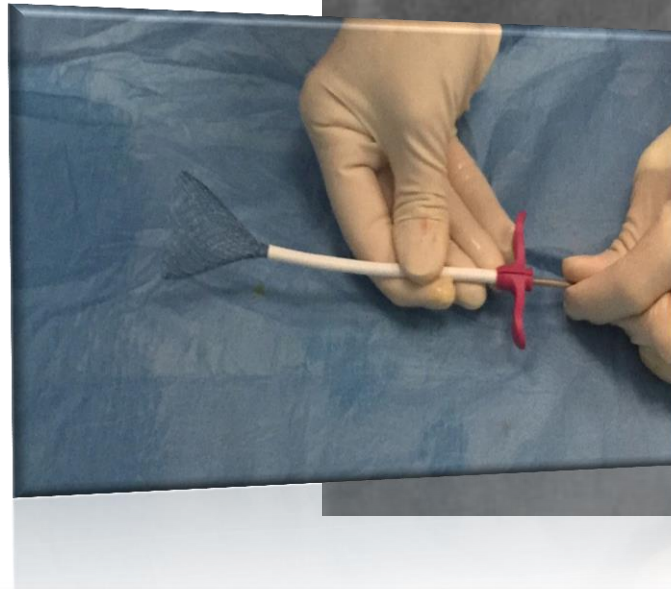
## 6 be sure to be able to manage complications

- **Pulmonary embolism:** - negligible rate
- **Cath. access bleeding:** - unfrequent
  - US guidance is mandatory
  - post-op. compression
- **Early re-thrombosis:** - depending on pts. features (coagulation defects....)
  - more frequent in extensive occlusive obstruction



## 6 be sure to be able to manage complications

Early thrombus  
removal  
techniques



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## do provide intraoperative anesthesia assistance

### *Venoplasty is painful*

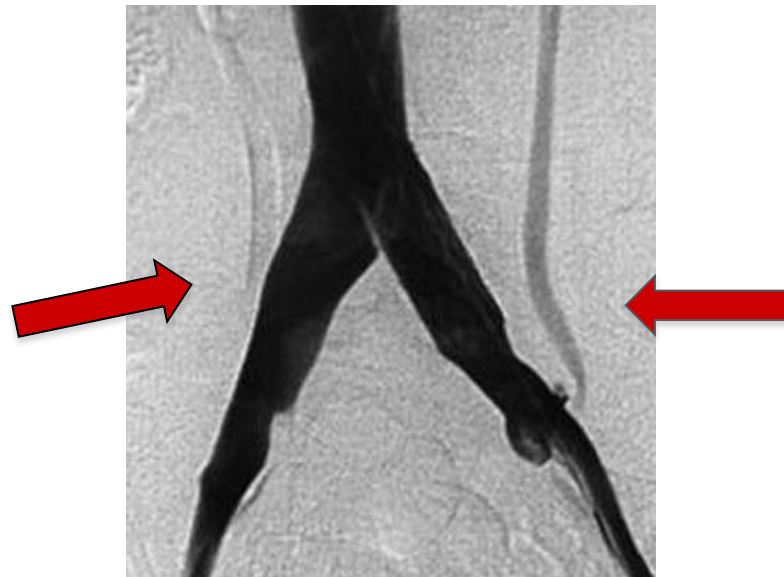
- **monolateral ilio-femoral procedure:**  
local assisted anesthesia
- **bilateral ilio-femoral and caval procedure:**  
general anesthesia

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Venoplasty is different from  
arterial and cardiac angioplasty.

The same basic endovascular technique  
but specific rules

diameter  
variation



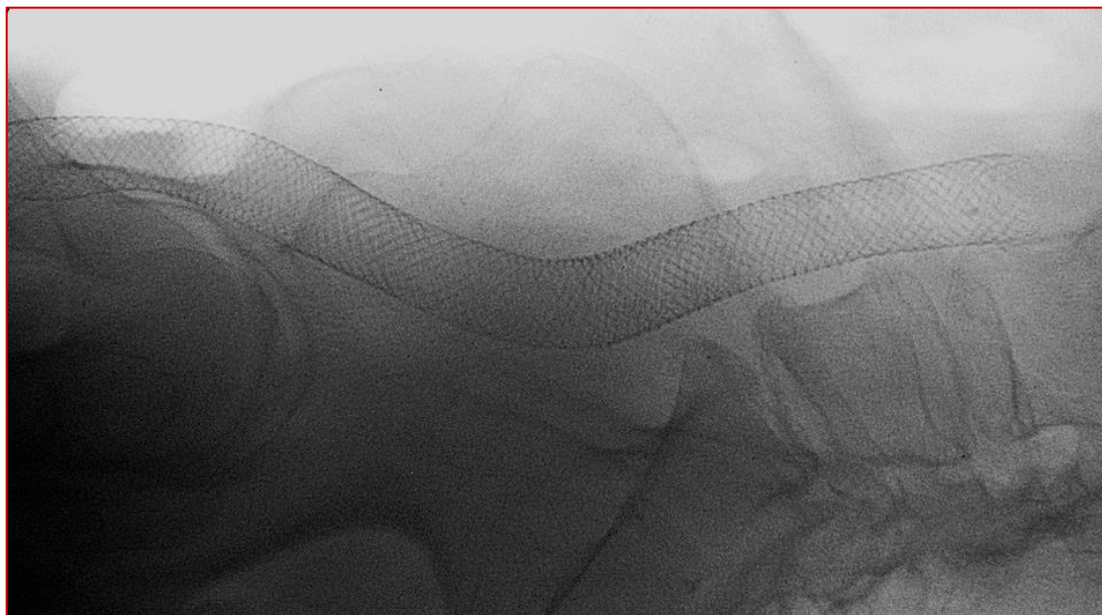
Vein wall  
compliance

stenting across the inguinal ligament



extensive stenting

*full metal jacket*





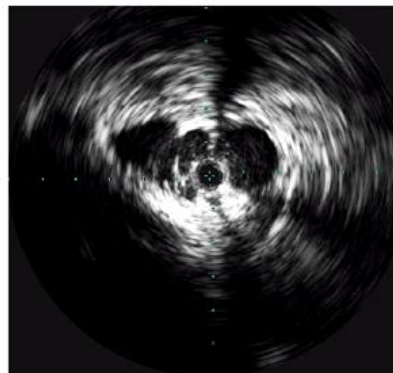
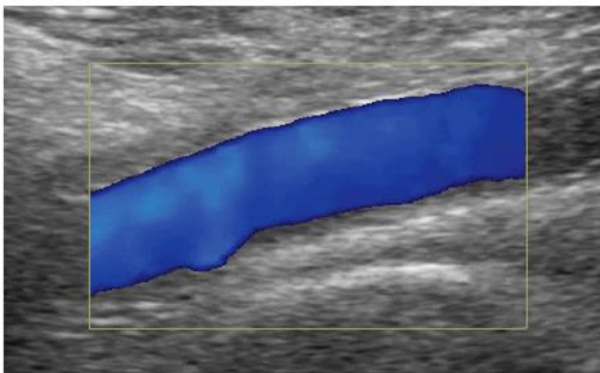
The logo for the EVF HOW Plus course, featuring the text "evf HOW Plus" in a stylized font with "evf" in blue and "HOW Plus" in red.

## Stenting of the Femoro-Ilio-Caval Outflow

EVF HOW Plus Course  
Modena, Italy - 23-24 April, 2015

Course Directors: Oscar Maletti and Marzia Lugli

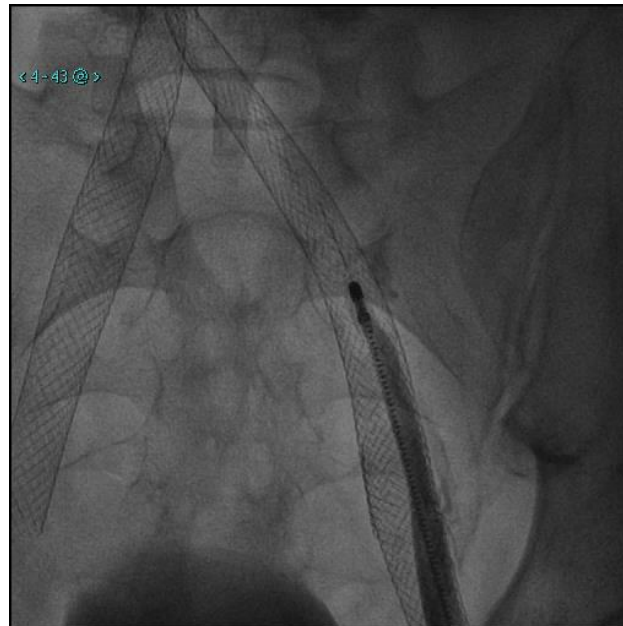
Vascular Surgery Unit  
Hesperia Hospital Modena, Italy  
[www.chirurgiavascolaremodena.it](http://www.chirurgiavascolaremodena.it)  
[www.dvrs-club.net](http://www.dvrs-club.net)



.....and many other  
tip and tricks

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in order to be able to provide thrombus removal  
in event on early reocclusion

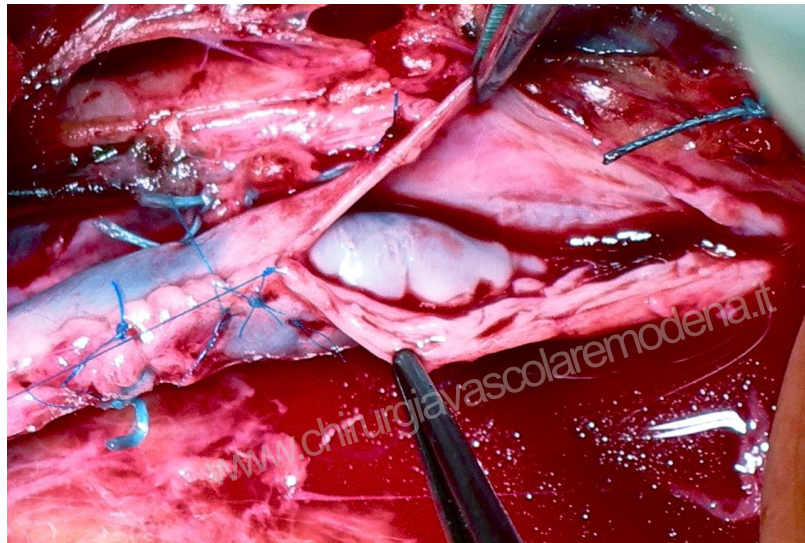


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**do consider to treat deep reflux if needed**

Obstruction treatment is not sufficient to ameliorate or to maintain results in all patients affected by PTS.

Approximately 50% of patients will require deep reflux treatment to improve their QoL



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.....my 10 rules  
for vein obstruction  
treatment success!!





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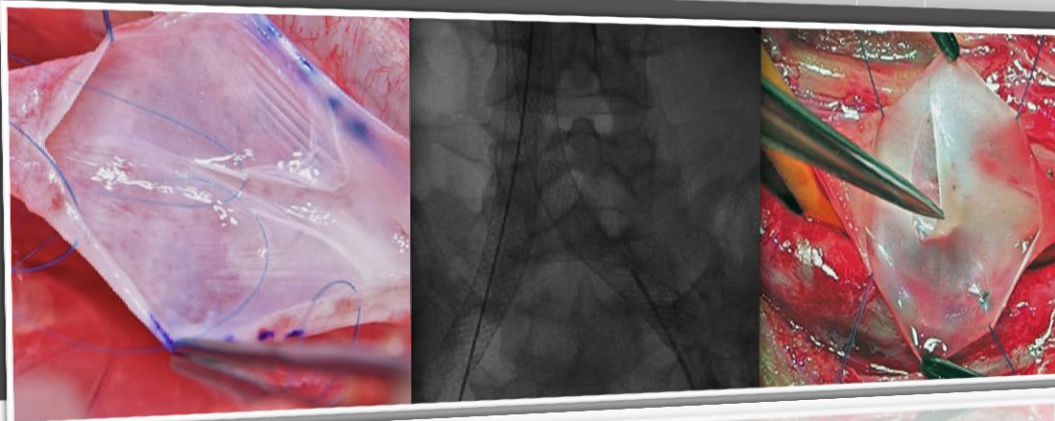
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*thank you*