What to do when the inflow is poor

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Disclosures

• Paid consultant to
  – Cook Medical
  – Optimed
  – BSCI
  – Medtronic
  – Straub
  – Marvao

Inflow patterns

• Normal-
  – Femoral Vein is the same size as Profunda Femoris
  – GSV irrelevant
• Post phlebitic-
  – FV is smaller/duplicated/absent
  – FV thick walled
  – FV not fully compressible
  – GSV more often damaged
  – PFV has hypertrophied
• Rarities
  – Persistent sciatic etc

Differentiate between “poor inflow” and “poorly delineated inflow”

DCTV v MRV

CTV

• Cheap
• Cheerful
• Quick (5 minutes)
• Radiation a problem
• Need IV contrast
• Indirect (standard CTV) is poor
• Direct CTV gives good images of inflow—but you need to cannulate foot on swollen leg side!!

MRV

• Radiation free
• No need iodinated contrast
• Even in expert hands takes 30 minutes

I love Ultrasound but

• Unless you are Nicos Labropolous the PFV can be difficult to identify
• Most Ultrasound techs do NOT look for it
• Most radiologists don’t look for it!!

• So in my opinion you need some other technique
34 y old female

- L IF DVT 2010
- Persistent symptoms since
- Leg claudication- 50 M uphill
- 15 pound weight gain
- No ulcers
- Mild VV formation

Identify your inflow!!!

Prove to me the Profunda is NOT your dominant inflow and THEN we are talking about poor inflow

- quite rare to have PFV severely scarred apart from at junction with CFV

Assuming CFV is scarred what are your options?

- Balloon angioplasty
- Cutting balloon??
- Stent??
- Arterio-Venous Fistula
  - Surgically created
  - Percutaneous (ROX Medical)
- Endovenous phlebectomy
  - Please look on VUMEDI to see the master at work- Comerota/endophlebectomy + AVF
Galway Protocol

• Direct CTV with compression stockings to drive blood deep
• Carefully analyse inflow pattern
  – FV dominant (easy- unusual)
  – PFV dominant (access more challenging, must open up good inflow by fair means of foul)
• Stent from IVC to wherever inflow comes in
• IF YOU CANNOT IDENTIFY GOOD INFLOW FROM ANYWHERE STOP!!!!!

Thank you!!