Use of dedicated popliteal venous access IVC filter during catheter based treatment of acute deep vein thrombosis

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Venous thrombolysis/thrombectomy for acute DVT

- Treatment of Iliofemoral DVT (IF DVT) is growing
- Results of ATTRACT trial are awaited Q1 2017
- Results of CAVENT trial suggests thrombolysis is superior to anticoagulation alone
Galway protocol for IF DVT

• All patients receive:
  – Colour Doppler US
  – CT Pulmonary angiogram
  – CT Venogram
Is PE common with IF DVT

- Galway data: 48% of patients are CTPA positive prior to intervention
Is PE common during endovascular treatment of DVT?

- PEVI trial
- Patients randomised to Catheter Directed thrombolysis (CDT) v Pharmaco-mechanical venous thrombectomy (PMT)
- All events POST procedure logged
- 8:1 incidence of PE in PMT v CDT patients
Galway experience n=207

• 2 fatal PEs within 24 h of CDT/PMT
Permanent retrievable IVC filter

- A large variety on market
- ALN (France) is our choice
Popliteal access - why?

- Patient is usually prone and jugular access is much more difficult
- Increases MY level of comfort during a PMT procedure
- Avoids a second puncture
  - important if CDT is being used as one cannot remove sheath and a jugular venous sheath for 48-72h is uncomfortable and unpleasant and usually results in a haematoma
ALN popliteal access

- 90cm shaft length
- 7F introducer
- Simple delivery
- VERY simple retrieval
Galway popliteal ALN filter use

- N=7
- Deployment in all cases successful
- Angulation minimal
- All patients CTV at 6/52
  - ? Stent and lower extremity patent
  - ? Position
  - ? Thrombus
  - ? Angulation
- Immediately post CTV taken to IR suite
- Right neck access

- Retrieval in all 7
- Retrieval times- skin to skin
  - 6 minutes (+/-3)
  - Fastest 29 seconds!!
Conclusion

• Not all patients need a filter during Endovascular treatment of acute DVT
• Useful early in your experience
• Popliteal route of access limits puncture sites
• Deployment and retrieval simple!
Thank you!
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