Nightmare in the cathlab

BTK Case

Michael K. W. Lichtenberg, MD
Conflict of Interest - Disclosure

Within the past 12 months, I or my spouse/partner have had a financial interest/arrangement or affiliation with the organization(s) listed below.

**Affiliation/Financial Relationship**               **Company**

1. Honoraria for lectures: CR Bard, Veniti, AB Medica, Volcano, Optimed GmbH, Straub Medical, Terumo, Biotronik, Veryan

2. Honoraria for advisory board activities: Veniti, Optimed GmbH, Straub Medical, Biotronik, Veryan, Boston Scientific

3. Participation in clinical trials: Biotronik, CR Bard, Veryan, Straub Medical, Veniti, TVA Medical, Boston Scientific, LimFlow, Terumo

4. Research funding: Biotronik, Boston Scientific, Veryan, Veniti, AB Medica
Rutherford V: severe ischemic rest pain

75 y, female

Progressive walking impairment through the last 2 weeks

Rest pain for 3 days

Medical History

• TEA left: 7/2015 (extern)
• In situ P3 venous bypass left 1/2016
• Post – CABG 2012
• CVRF: Diabetes, HLP, controlled hypertonus
Outflow
Procedure plan

• Rotational thrombectomy with Aspirex 6 F System (venous bypass)
• POBA distal with 2.5 x 100 mm Balloon

After 2 minutes POBA……
Even worse clinical symptoms
Bail out options?

- Prolonged POBA? – we did over 10 minutes
- Thrombolysis? – afraid of compartment
- Bypass???
- Amputation ???
- Other options ???
Venous arterialization
LimFlow: Review of Procedure

- Ultrasound Receive catheter
- Ultrasound Send catheter
- Retrograde insertion of Receive catheter into target vein
- Insertion of Send catheter into artery and orientation
- Crossover and insertion of GW
- Predil and insertion of covered stent
Challenge in this case...

Puncture through Viabahn
Procedure

Arterial access 7F

Venous access 5F
PTV Access
Antegrade 7F sheath in CFA

Retrograde 5F sheath in Posterior Tibial Vein under Ultrasound or Fluoroscopy
Deep vein angiography
Tercross Balloon
2.0 x 40 mm
3.0 x 40 mm
4.0 x 40 mm

Hydrophilic coating: 340-420mm*¹

Hydrophilic coating: 880mm
4F Over-the-Wire Valvulotome
1 day post intervention

Still bleeding from venous puncture site

TcPo2: 24 mmHg
Conclusion

• Venous arterialization is an option for „no option situations“
• Dedicated low profile balloons and recanalization devices are mandatory
• Intensive follow up of patients with venous arterialization is needed
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