Challenging Vascular Access Cases

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Disclosures

- Cook Medical
  - Proctor and case reviewer for aortic interventions
- W. L. Gore and Associates
  - Speaker
  - Consultant
- Bectin Dickinson (formerly Bard)
  - Speaker
  - Consultant
- Humacyte
  - Local PI for Humanity Phase II trial

Challenging Access Cases

Access Challenges
- Creating access
  - New AVF/AVG
  - Re-establish AVF/AVG
- Maintaining Access
  - Anastomotic lesions
  - Cannulation zone lesions
  - Venous outflow pathology
- Complications
  - Infection
  - Ischemia

Dialysis Access Challenging Case

37 AA female:
- Oxygen dependent COPD-
  still smoking
- BMI 37.1
- Left handed
- Diabetes
- Lupus

Dialysis Access Challenging Case

37 AA female – access history:
- Multiple TDCs recently had completed antibiotics for infection
- Current access is non-functional left femoral TDC
- "poor candidate" for AVF due to "small veins"

Dialysis Access Challenging Case

37 AA female – challenges:
- Morbidly obese
- Needs immediate access
- Suboptimal anatomy
**Dialysis Access Challenging Case**

37 AA female – plan:
- Right upper extremity AVG
- Explore axillary vein
- Venogram

Venogram via 5F sheath in the brachial vein in the axilla
- Diffusely diseased central veins

- 9 mm PTA via 9F sheath

Gore 4-7 Acuseal connected to the brachial artery in the axilla

Acuseal anastomosed to Gore Hybrid graft (6 mm, 9 mm x 10 cm NRS)
Dialysis Access Challenging Case

37 AA female – challenges:
- Morbidly obese
- Needs immediate access
- Suboptimal anatomy

The solution:
Right upper arm loop AVG with 4-7 Gore Acuseal in the cannulation zone, 6 mm Gore Hybrid with 9 mm NRS for the venous component to treat axillary vein disease
"I don't want the cheese, I just want out of the trap"