Interesting Uses For The Gore Hybrid PTFE Graft Which Combines A Covered Self-Expanding Stent At One End With A Standard Vascular Graft At The Other End: Advantages And Limitations

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Disclosures

• Gore

Gore Hybrid Graft

The GORE® Hybrid Vascular Graft is an expanded polytetrafluoroethylene (ePTFE) vascular prosthesis that has a section reinforced with nitinol. The nitinol reinforced section is partially constrained to allow for easy insertion and deployment into a vessel.

The GORE® Hybrid Vascular Graft has a continuous lumen and is coated with the CARMEDA® BioActive Surface (CBAS® Surface) consisting of a stable covalently bonded, reduced molecular weight heparin of porcine origin.

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Improved Patency

Ease of Use

What is the Benefit of the Stent?

Improved Patency
Ease of Use

Sutureless anastomosis

• Diseased target vessel
  • Calcification, dissection, plaque
    • Orifice and more distally
  • Less exposure for difficult areas
  • No narrowing of anastomosis
  • Less ischemic time
Where is the hybrid graft useful?

- AV Access
- TAAA/Arch
- Open Aneurysm Repair
- Lower Extremity Bypass
- EIA-IIA Bypass
Technical Tips

• Don’t let circulator pull string by accident
  – Partial deployment is unusable
• Size stent portion appropriately-Oversize
• Tunnel graft
• Stent portion should be first anastomosis to ensure appropriate length

Technical Tips

• May need peel-away sheath
• End-end or end-side
• Insert gently to not disrupt end of stent
  – Not tapered, flush endpoint
• Insert ½ way in

Technical Tips

• Hold stent and target vessel in place while deploying
• Suture fixation
  – Needed for end-end
  – Suture to stent
• Size length of PTFE accordingly
  – Tortuosity can kink at stent/ptfe juncture

Limitations

• Loss of branches off target vessel
• No retrograde flow
• Short lengths
• Limited stent diameters

Use of a novel hybrid vascular graft for saphenous revascularization of the renal arteries during open thoracoabdominal aortic aneurysm repair
Conclusions

• Hybrid graft offers new technology
• Benefits of heparin-bonding
• Sutureless functional end-end anastomosis
  – Benefits
  – Limitations