Most Aorto-Iliac Occlusions Should Be Treated Endovascularly With Stents: But There Are Limits That Require Open Surgery

George H. Meier, MD RVT FACS
Professor and Chief, Vascular
University of Cincinnati COM

Disclosures

Research Support
Cook, Toad

Educational Support
Medtronic

We Have a Good Operation, Why Endovascular?
• Patients have risk factors for open surgery
• Some treatments may need to be repeated
• Endovascular options may exist where open do not
• Short of pharmacologic therapy, endovascular is the future…

Iliac Angioplasty
• Percutaneous Transluminal Angioplasty (PTA) inherently traumatic!
• Success = dissection
• Initial skepticism that success possible, gradual acceptance of the technique
• Are stents mandatory?
What are the Limitations to Endovascular Treatment?

- Size (artery too small)
  - Trauma (especially adolescents)
  - Congenital issues
- Previous bypass
- Unusual circumstances
  - Younger patients?

BASIL Trial: It Doesn’t Matter!

Hybrid Procedures
- Combining endovascular and open is advantageous
- Limit operative issues
- Can it replace open surgery?

JG
- 15 year old AAF with history of Tetralogy of Fallot, treated by multiple procedures prior to age 5
- Many, many cardiac caths from femoral approach
- Presents to me at age 15 with disabling right leg claudication, lifestyle limiting
JG - 2

- Growth plates nearly closed
- Socially disabled by limitations
- Wants normal ambulation!

JG – Operative Plan

- Exploration of right iliac via femoral and retroperitoneal incisions
- Angioplasty from iliac origin to iliac bifurcation:
  - 7 mm balloon inflated in aorta and withdrawn to dilate right CIA
  - Artery enlarged appropriately after angioplasty
- Bypass with 8 mm PTFE
Conclusions

- While endovascular may be the future, sometimes we need to replace the artery with a new conduit
- Endovascular still has a role even in open iliac operations
- Don’t expect the future to return to the past!