Lateral Femoral Bypass for Prosthetic Arterial Graft Infections in the Groin

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Introduction

• Incidence of graft infections involving the groin: 2.5%
  High rate of morbidity and limb loss


• Obturator bypass (OB) has been suggested for revascularization
  65% primary patency at 24 months
  81% limb salvage at 36 months


...but no one really knows how to do this

Lateral Femoral Bypass

Patients & Methods

• 2000-2017
• Prosthetic arterial graft infections at our institution

Post-Op Duplex Surveillance Protocol
  Every 3 months x 1 year, then
  Every 6 months x 1 year, then
  Annually

Lateral Femoral Bypass

Technique

1) Groin isolation
2) Remote proximal/distal exposure
3) Graft tunneled laterally under inguinal ligament
Lateral Femoral Bypass

Results
• 19 LFBs performed on 16 patients with PAGIs involving the groin

Conduits
10 cadaveric grafts
6 autogenous vein grafts
2 Rifampin-soaked Dacron grafts
1 PTFE graft

Average follow-up: 33 months (0-103 mos)

Major adverse events within 30 days:
1 (5%) death – overwhelming sepsis
1 (5%) graft excision - pseudoaneurysm and re-do cadaveric graft bypass

Patency

Primary
73% at 24 months

Primary assisted
83% at 24 months

One PTFE LFB conduit became infected at 15 months, requiring explant
One graft thrombosed necessitating above knee amputation (17 months after LFB)
Overall limb salvage rate: 94%

Conclusions
• Compared to obturator bypass
  excellent patency and limb-salvage rates
  technically less complex and morbid
• DU surveillance critical - excellent outcomes
Preferred Rx for prosthetic graft infections involving the groin