



Extreme alternative arterial access in critical limb ischemia

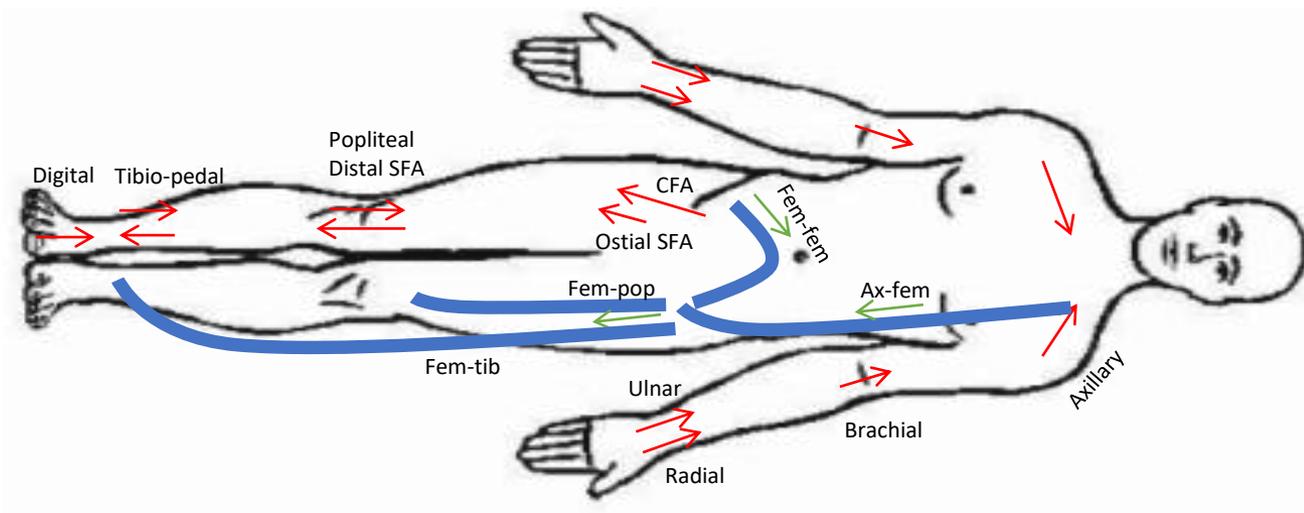
Antegrade access of an axillary-femoral bypass

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Ascension Saint Thomas Heart

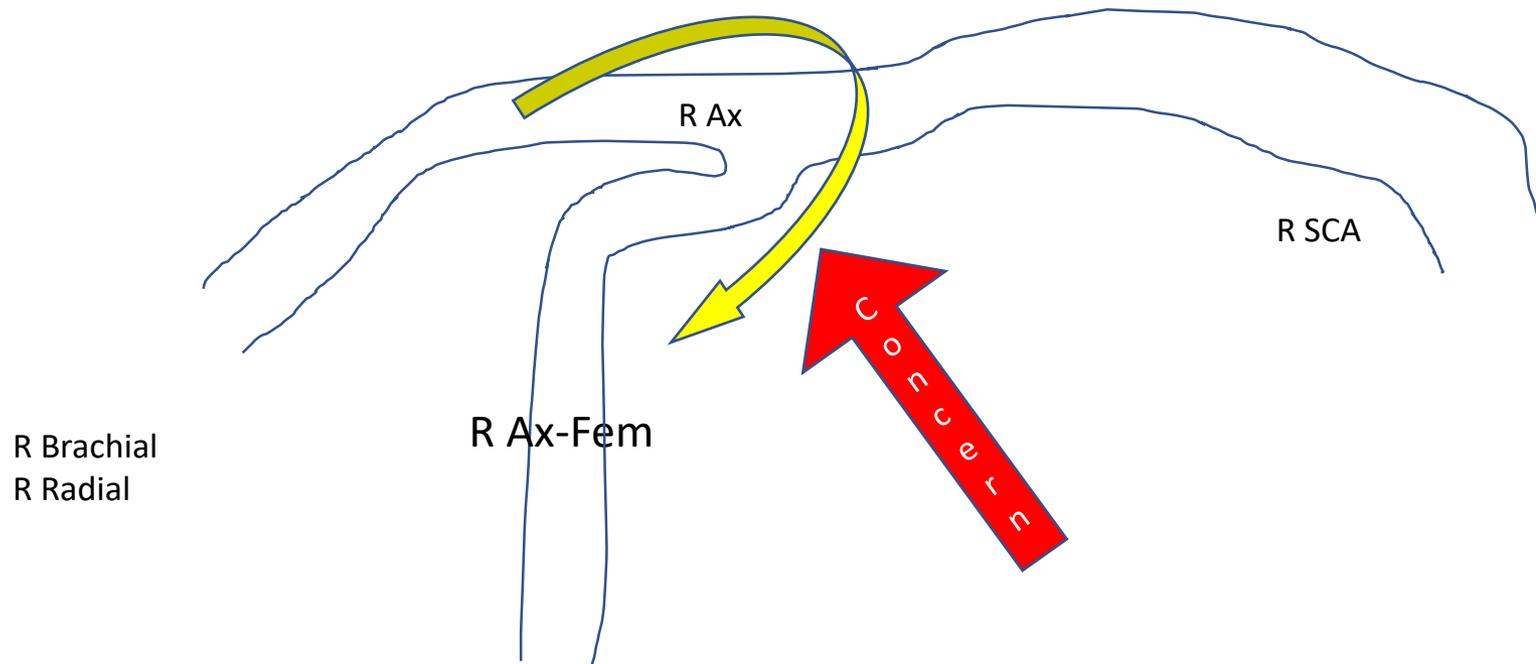
Murfreesboro & Nashville TN - USA

Alternative access sites



- 57 yo male
- Right shin non healing arterial ulcer
- Occluded Abdominal Aorta and both iliac arteries
- Bilateral Axillary-femoral bypasses 12 years ago

- **Duplex ultrasound + CT Angiogram:**
 - Patent right axillary-femoral bypass
 - Severe ostial right superficial femoral artery stenosis
 - Occluded right profunda femoris artery
 - Occlusive triple vessel infra-popliteal disease



- Tibio-pedal retrograde access concerns:
 - Triple vessel tibial occlusions
- Access complication → Amputation
- Antegrade common femoral artery or distal axillary-femoral bypass at the groin: Not enough room

- Antegrade access of right Axillary-femoral bypass
- Lower rib cage



Severe
stenosis at
distal graft
anastomosis

Poor distal
outflow

Slow and
prolonged
DEB
angioplasty

Final angiogram



- Protamine
- Pursestring suture
- Manual - 20 min
- No laying flat
- Early discharge



Surgical bypass graft

Access

- Alternative access: *Individualized decision*
 - Review Operative report
 - Careful image review
 - Multi-disciplinary discussion
- US

Micro

Over bone

Smallest sheath

Full thickness sheath

Braided sheath

Underlying bone

Closure

- Manual
 - Purse-string suture
 - Protamine
 - Individualized recovery
 - Duplex post
 - AB prophylaxis
- Compressibility

Course