

# Therapeutic Options in Critical Limb Ischaemia

L. Graziani

- **PTA**: low risk, highly feasible, variable patency rate.
- **Bypass Surgery**: increased risk, less feasible, PTA often necessary to maintain patency.
- **Amputation**: high risk for major amputation, 2nd amputation frequently necessary, disability.
- **Conservative/Sympathectomy**: benefit unproved.
- **Gene Therapy and Angiogenesis**: initial experience, early results unclear, oncogenicity?

# Diabetic foot: Below the Knee Revascularization Procedure

L. Graziani

- Antegrade approach
- Low-profile (coronary type) wires and catheters
- Long (8-10 cm) balloons, if needed
- Prolonged inflations (3-8 min !!) using low-compliant balloons at high pressure (13-18 Atm)
- Accurate choice of suitable balloon size
- Rotablator® for some short recurrences
- Avoid using Stents, particularly below the knee!
- Effective antiplatelet therapy (clopidogrel, ticlopidine)

# Therapeutic Angiogenesis in PVD: TRAFFIC STUDY

L. Graziani

- Is the First Large, Phase II, Multicenter, Randomized, Double blind, Placebo-controlled, Regimen-finding, Study.
- Patients: stable intermittent claudication.
- Peak walking time on standardized treadmill, at 90 days showed improvement in the *single dose* but not in the *double dose*, compared to control.
- This improvement, however, was not noticed at 6-month follow-up.

# Therapeutic Options in case of Perforation during Fem-Pop and Tibial PTA:

L. Graziani

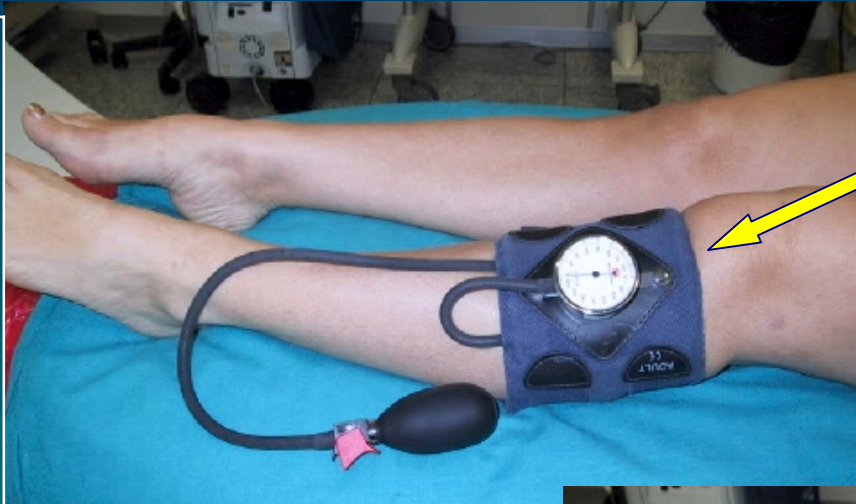
1. **Tamponade**: use regular or large size pneumatic cuff inflated over systolic pressure, *eventually associated with concomitant prolonged balloon inflation.*
2. **Covered Stent**: only in case of persistent massive blood leakage. High risk of thrombosis. Self expandable Stent preferable.
3. **Embolise**: only in case of persistent leakage.
4. **Leave Alone**: in case of minimal leakage.
5. **Surgery**: only in case of unsuccessful percutaneous methods.

# Emergency Arterial Compression using a pneumatic cuff (tamponade)

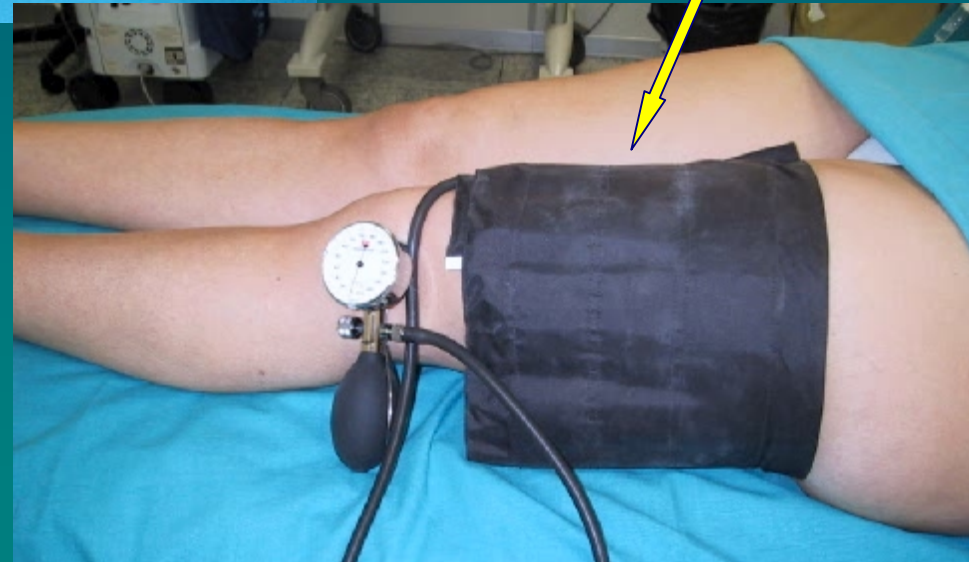
L. Graziani

## Our method:

1. Reverse heparin.
2. Inflate cuff for 3 minutes.
3. Deflate and wait for one minute.
4. 2nd cuff inflation for 3 minutes.
5. Angiogram.



Leg  
Regular size



Thigh  
Large size

# Therapeutic Options in case of Embolization during Fem-Pop and Tibial PTA:

L. Graziani

- **Percutaneous embolectomy:**
  1. Large-bore catheter aspiration (coronary 5-8Fr guiding catheter).
  2. Basket retrieval for large *atheromasic* embolus.
- **Thrombolysis:** trans-catheter, low dose urokinase.
- **Stent:** self-expandable narrow-struts preferable.
- **Surgery**