BELOW KNEE CROSSING TECHNIQUES

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DISCLOSURES

- Consultant: Cook
- CAP: Lombard Medical
- Proctor: Lombard Medical, Medtronic
- No shareholdings
CLI: 40% INFLOW
OCCLUSIONS
EQUIPMENT

- adequate access (6F allows .014 + .014 guide cath for rendezvous in the arch/trans collateral loop retrograde crossing)
- long sheath to selected vessel (4F with pressurized hepsal flush)
- selection of wires: .018-.014
  - Hydrophyllic, graded deflection weight tip CTO, support shaft, drilling tips
- support catheters .018-.014, braided support and trackable soft for collateral loop access
- balloon ranges including low crossing profile, high pressure
  - monorail and OTW
78YR OLD FEMALE: DM, DIALYSIS
PROJECTIONS
CROSSING WIRE
HAEMOSTASIS
HAEMOSTASIS
POTENTIAL ACCESS SITES

- Patent or occluded segments of AT or PT.
- Patent segments of peroneal.
- Dorsalis pedis, plantar bifurcation, medial and lateral plantar, first metatarsal (dorsal interosseous)
- Accessing an occluded segment is useful for the desert foot.
WHEN TO CHANGE ACCESS POINT?

If you think of it, it's probably the right time.

Predictable?
1987 Taylor and Palmer
Initially used in plastic reconstruction

Anatomy variable and not always possible to achieve direct revascularisation.

Definite advantage in L.S. if achieved.
177 limbs
86% Vs 69% at 1 yr
82% Vs 64% at 4 yrs

Osamu Iida

Picture from: J Endovasc Ther 2008;15:580–593
Diabetic renal failure
Once outside the calcium line: change approach
WHICH VESSEL?

71 year old male
DM
Dialysis
STAYING INSIDE THE CALCIUM LINE
POOR / OCCLUDED DISTAL VESSEL
PERFUSION ANGIO

- Post processing software
- No additional contrast or radiation
- Practical use: movement sensitive!!
FIRST PATIENT: OTHER LEG
OUTFLOW
PERSISTENCE
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