

A photograph showing two feet with severe diabetic foot ulcers and gangrene. The left foot has a large, dark, necrotic ulcer on the heel and a smaller one on the toe. The right foot has a large, dark, necrotic ulcer on the heel. The feet are resting on a white surface.

**Interventional radiology should be the
initial course of management in
diabetic PVD**

ABCD Debate 12-11-04

Malcolm Simms opposing the motion

The Motion

Absurd oversimplification

or

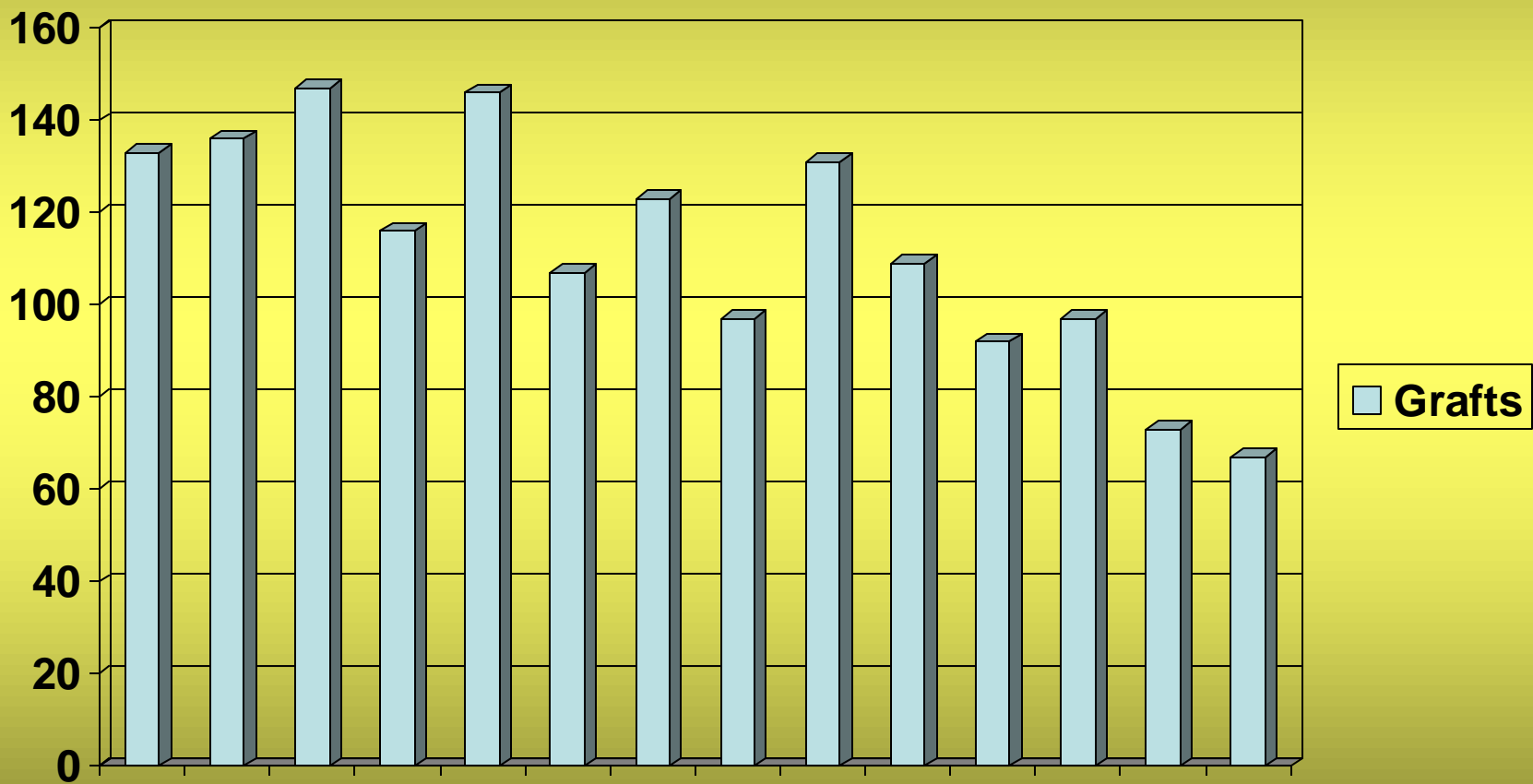
Valid generalisation



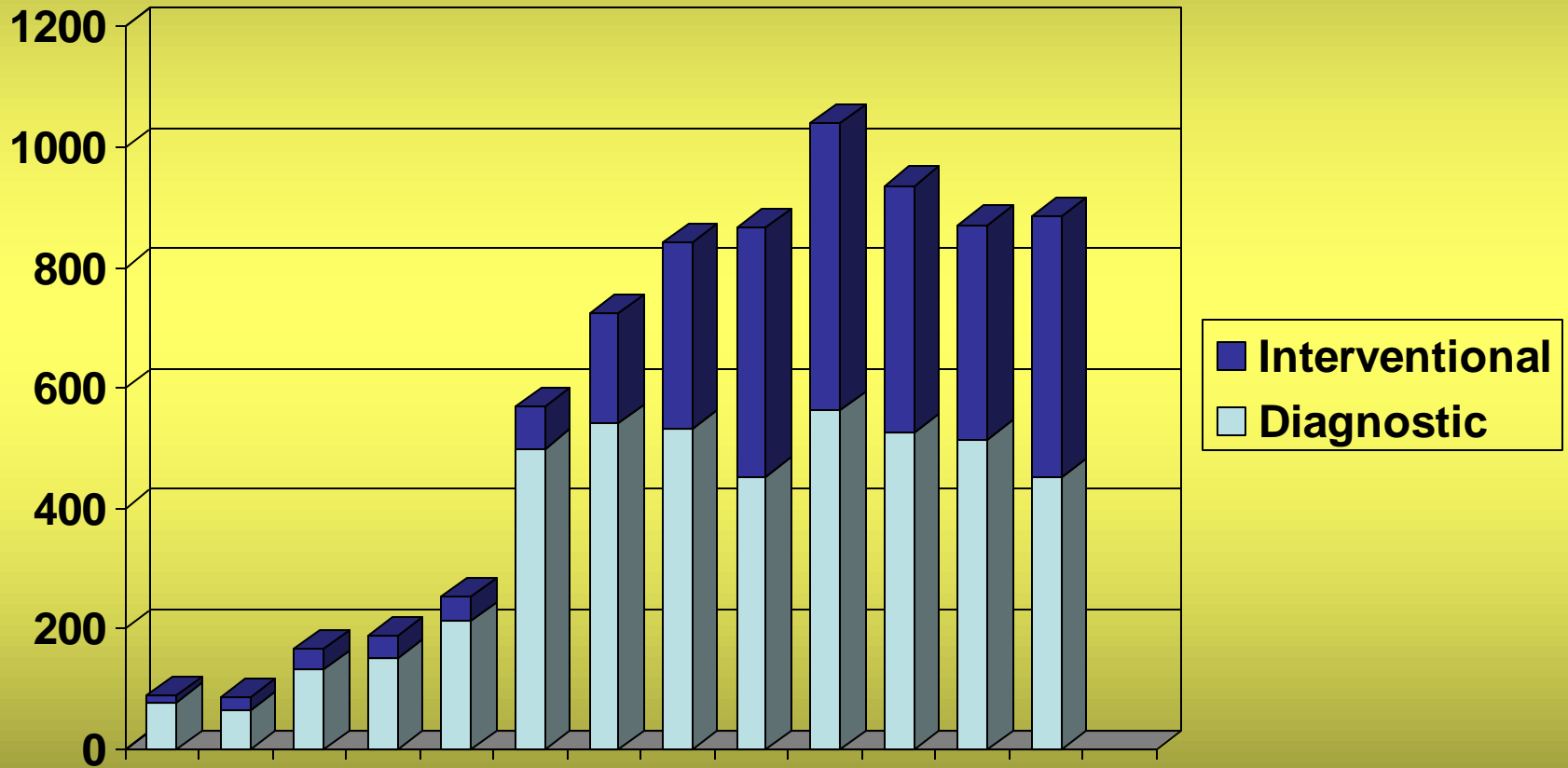
Just a prick



Annual reconstructions for lower limb ischaemia- MS 1990-2003



Annual arteriography SOH 1990-2002



The shift from surgery



PTA

Pre

Post



SIA

Pre

Post

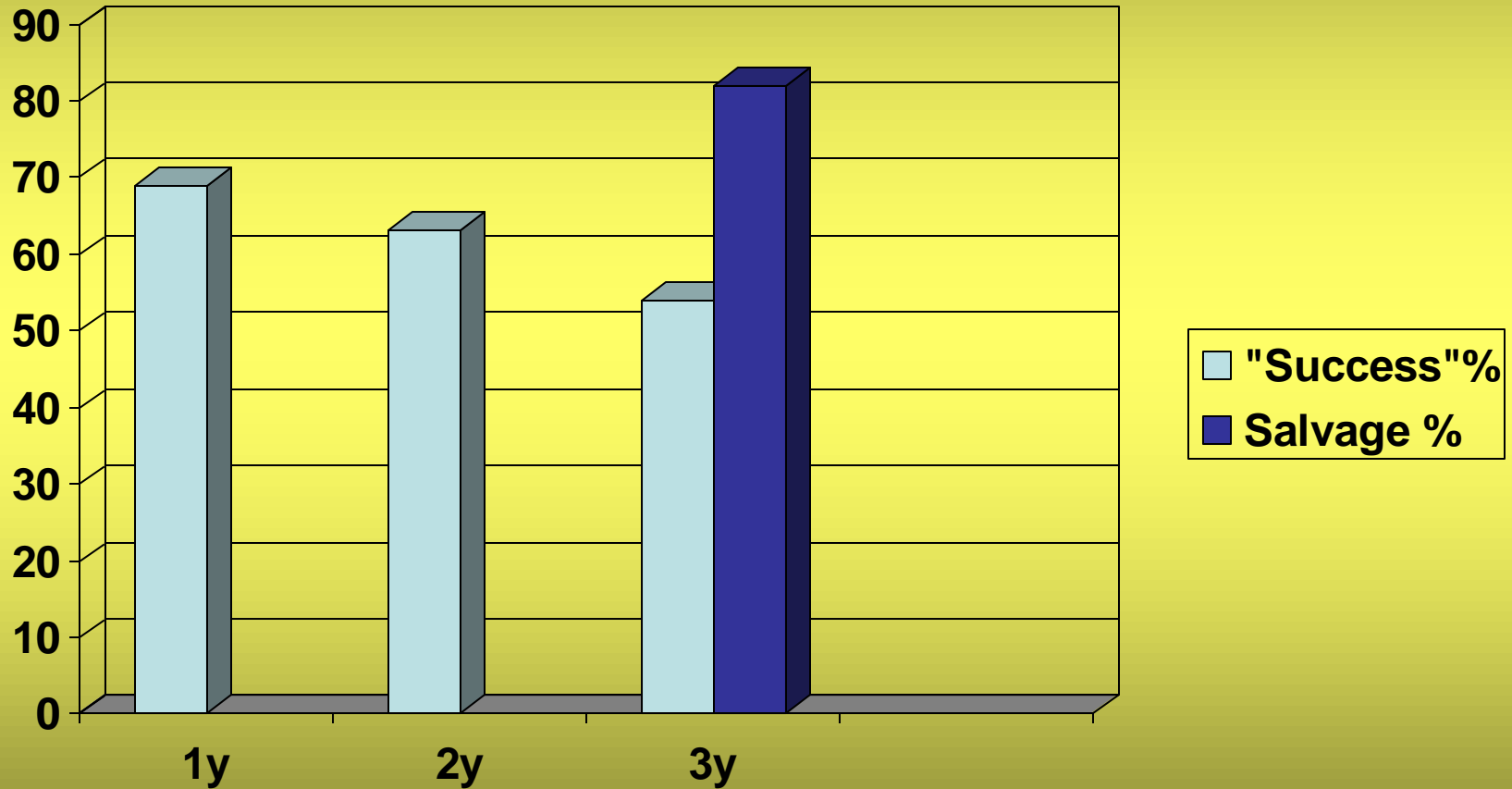
Advantages of angioplasty

- Quick to do
- Short stay
- Complications ~ 20%(4)
- Success ~ 80%
- Repeatable
- Surgery still feasible
- Durability mirrors life expectancy

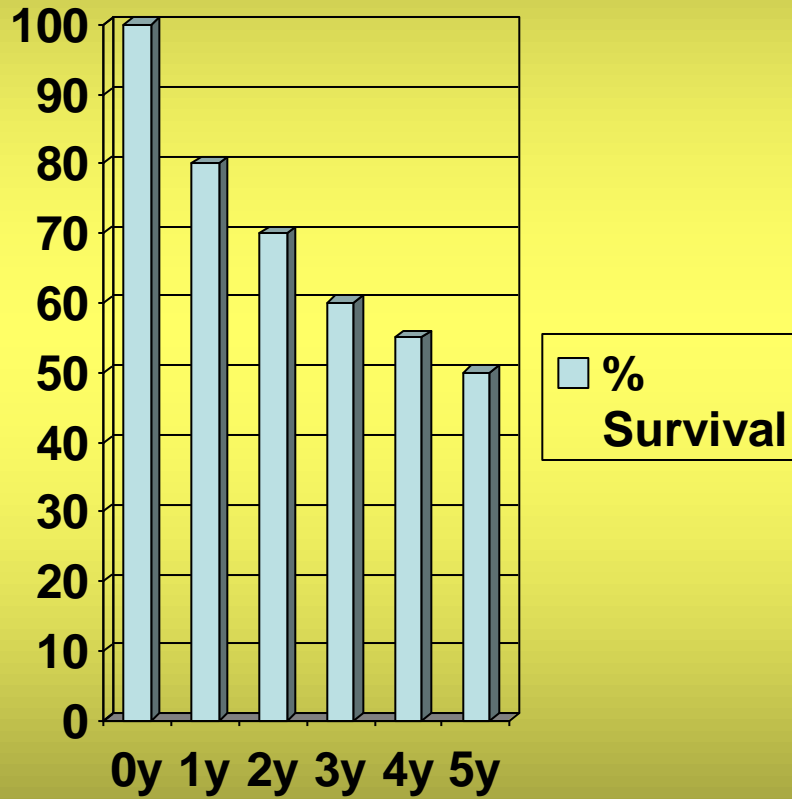


Durability of SIA in Diabetic PVD

(nb excludes initial 19% technical failure)



Survival in CLI (pooled)



If it's that simple, why not cut out the (surgical) middleman?



Patient Factors-

- **Psychological**
- **Social/Family**
- **Physical function**
- **Metabolic**
- **Nutritional**
- **Anaesthetic status**



Limb Factors-

- **Mobility (nerves, muscles, joints)**
- **Sensation**
- **Sepsis (sup. & deep)**
- **Viability**
- **Arteries (occlusion & calcification)**
- **Veins (sup. & deep)**



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Vascular evaluation pre-angio

- **Clinical-**
pulses/perfusion/skin
- Venous reflux/ulcers
- ABPI (?)
- Pole test
- Doppler mapping
- Pedal arch patency
- Duplex imaging



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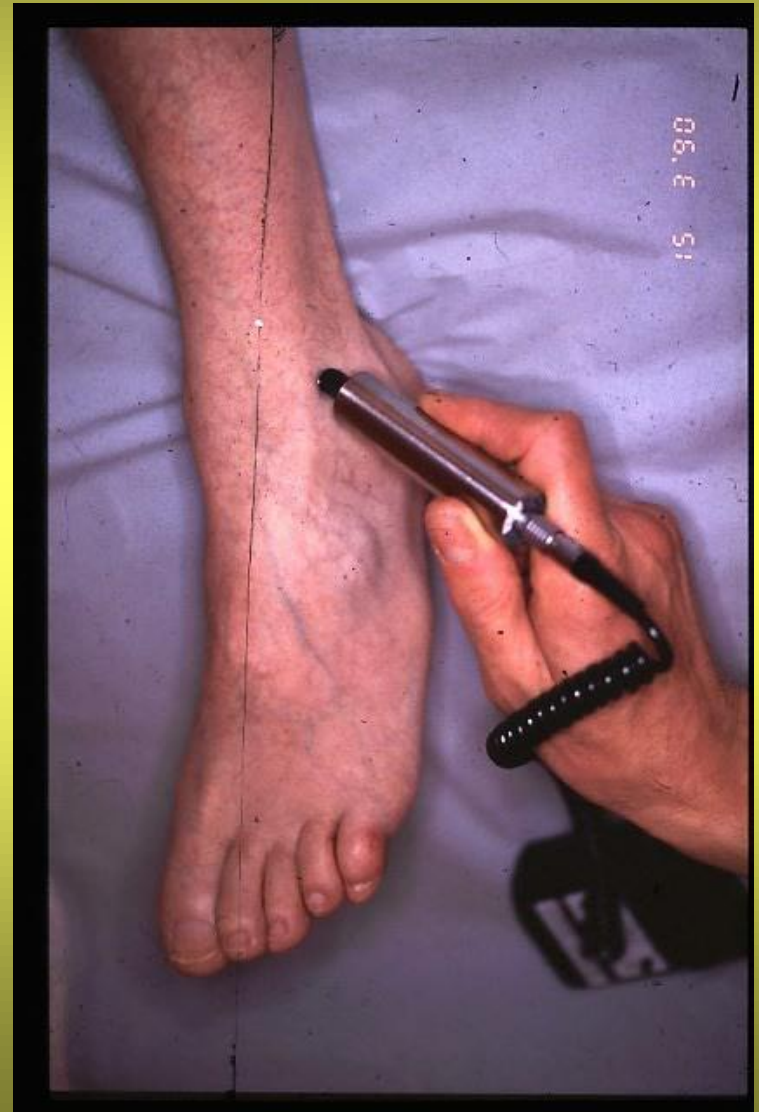
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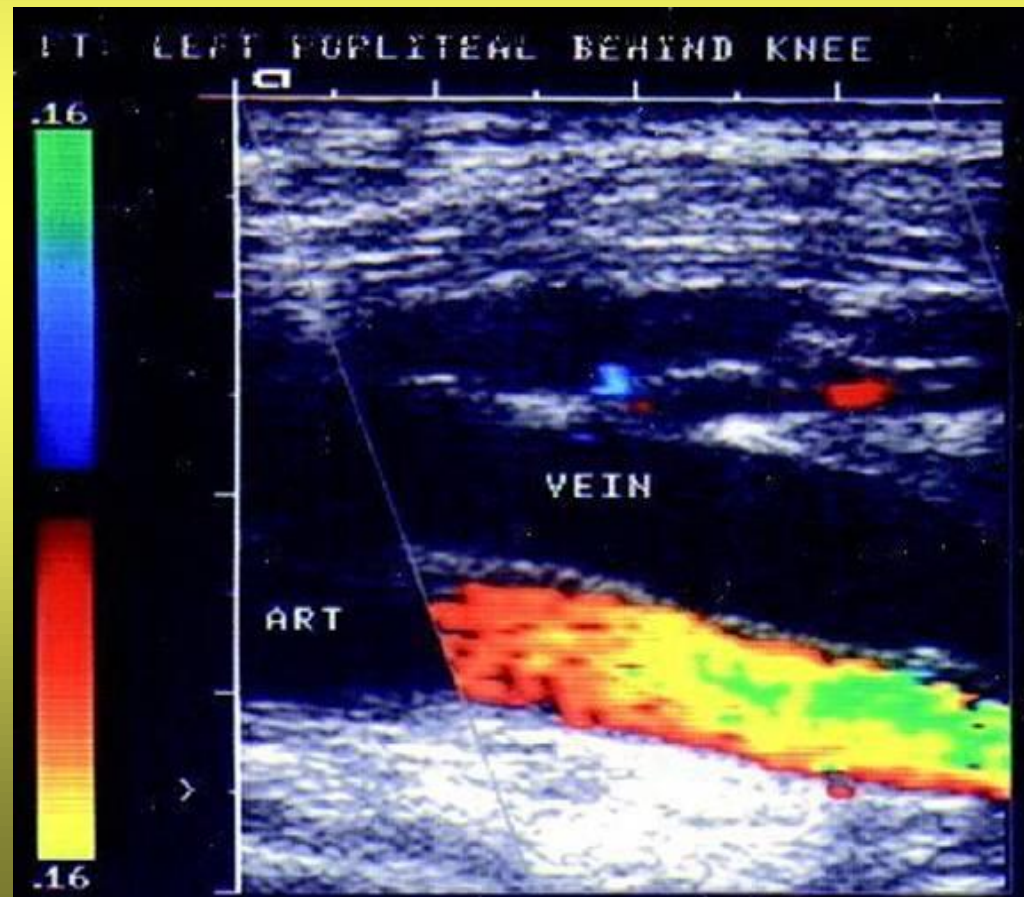
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Current SOH practice- Angioplasty:Surgery 3:1 -When to operate?

100 grafts 2000-2002

| | |
|-----------------------------|--------------|
| Failed angioplasty | - 8 |
| Occlusion →foot | - 8 |
| Popliteal aneurysm | - 5 |
| Acute thrombosis | - 3 |
| Failure of old graft | - 23 |
| Inflow/CFA occlusion | - 30 |
| Surgery “obligatory” | - 64 |
| “optional” | - 36* |



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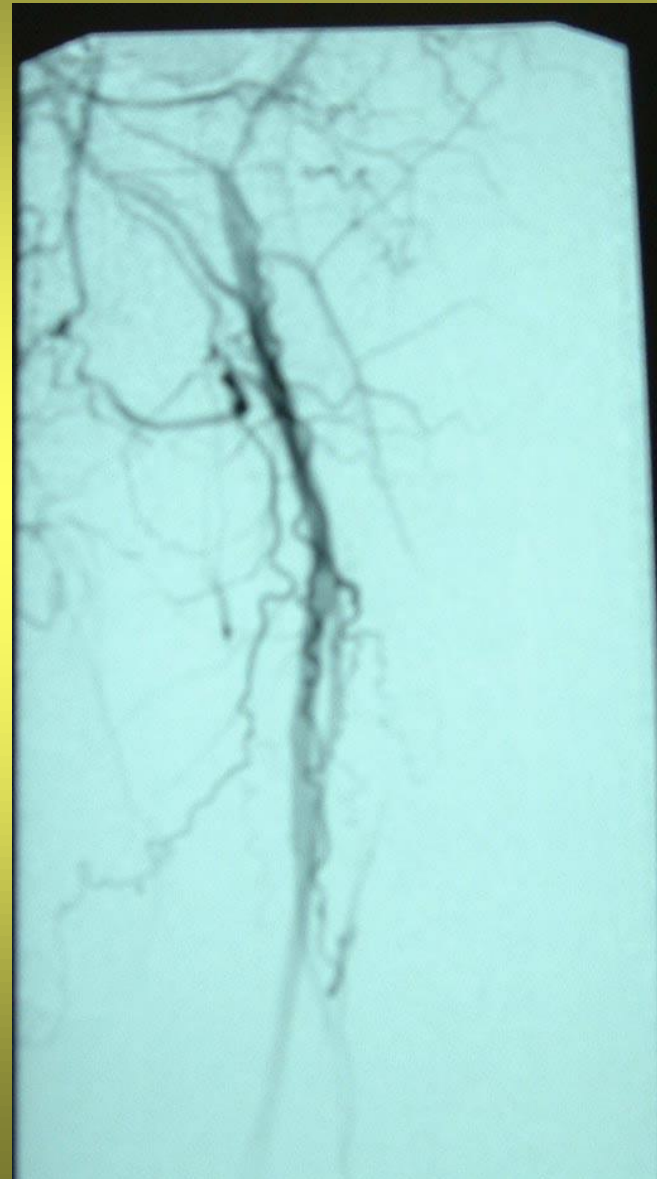
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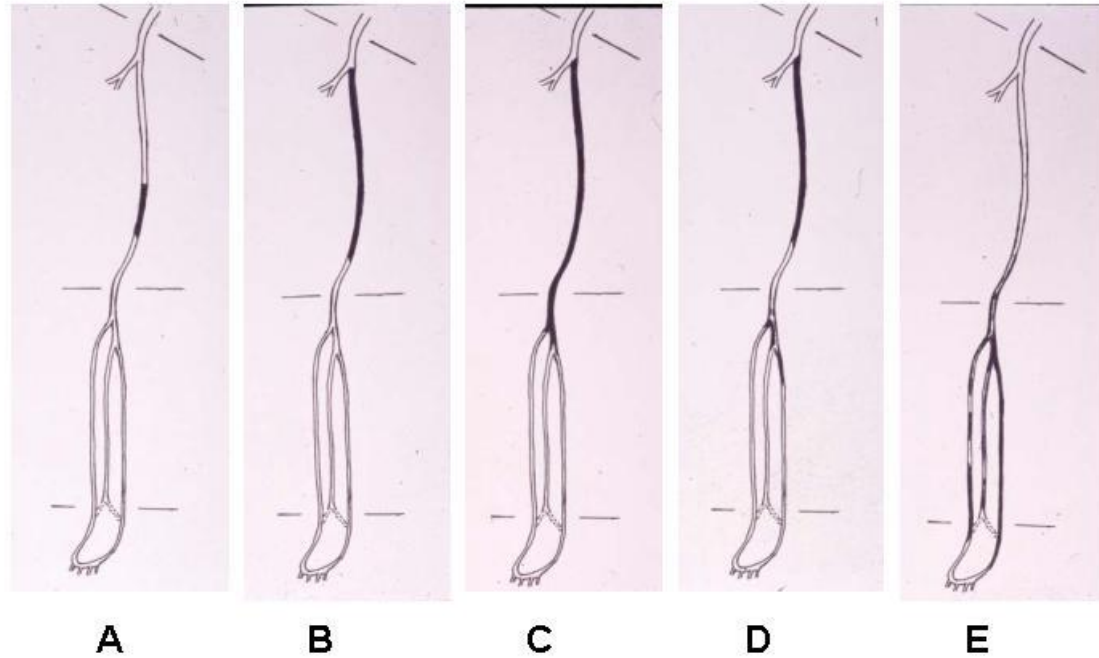
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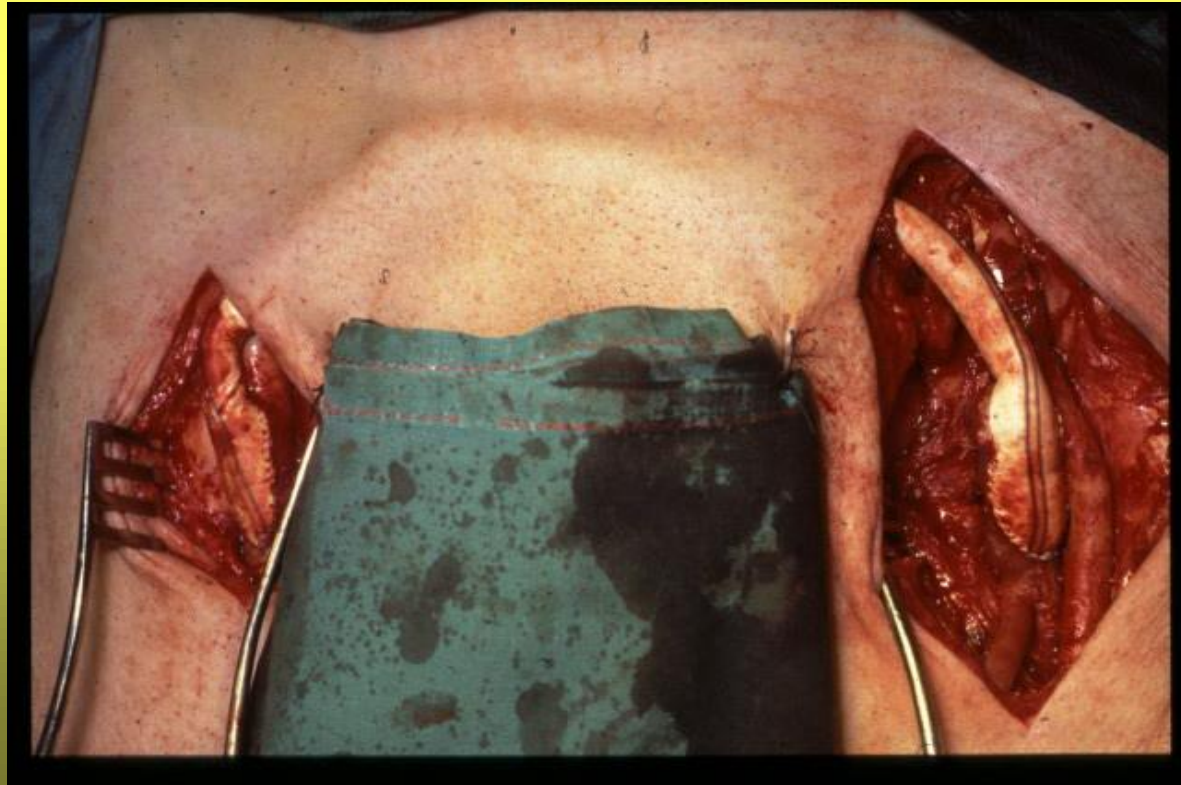
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- **Adapts to Anatomy**
- **Compatible with LA**
- **Quality perfusion**
- **Durability**



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- Adapts to Anatomy
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- Durability (65% pat. at 1y, few late failures)



Acquired syndactyly-
12y post fem-tib

Reasons for surgical nihilism.....

- Steep and prolonged learning curve
- Operating time
- Microvascular training
- No margin for error
- Anaesthetic morbidity
- High revision rate



Enthusiasm essential!

Multidisciplinary approach essential when therapeutic options unclear

Angioplasty favoured

Short or single level block

Limited ulcer/gangrene

but

Poor rehabilitation and
survival prospects

Surgery favoured

Multi-level block

Extensive necrosis

but

Good rehabilitation
potential



**Support your local vascular surgeon-
Reject the motion!**

