MIDDLE THIRD:
SOLEUS FLAP
Soleus Flap

1. Define/control wound
2. Design incisions
3. Dissect/Elevate flap
4. Rotate Flap into position
5. Inset flap
6. Skin Graft flap/Close donorsite
7. Post operative management
Indications/Applications

- MIDDLE THIRD OF THE LEG
MIDDLE/DISTAL?

Orthopaedic Trauma Institute
UCSF + San Francisco General Hospital
Soleus Anatomy

ATTACHMENTS

Origin: Proximal Tibia and fibula

Insertion: Calcaneus through the Achilles tendon
Vascular Anatomy

Branches of the popliteal artery trunk, the posterior tibial artery, and the peroneal artery supplied the soleus muscle.

The medial part of the muscle was supplied throughout its length by perforators arising from the posterior tibial artery.

The average distances of the lower perforators arising from the posterior tibial artery were 6.5 cm, 11.6 cm, and 16.8 cm from the medial malleolus.

The branches of the peroneal artery were mostly distributed in the upper half of the muscle.
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Elevation/Skin incision
Soleus Flap

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IDENTIFY LAND MARKS
Arc of Rotation

- Only divide attachments as needed to complete rotation
- Too much dissection will disrupt segmental perfusion and lead to dead flap.
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Skin Graft FLAP
Post op care

Skin graft dressing, vaseline gauze, non stick 5 days
posterior splint 2 weeks
Weight bearing per orthopedic fixation
+/- Bone graft 2-3 months
Progressive dangling at 1 week