Foot and Ankle Symposium: Post-traumatic Reconstruction

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Fibula lengthening
Short fibula
End Distraction, 2 weeks
Preop 4 weeks
4 months
Ankle Fusion with Ilizarov Frame

Septic arthritis and osteomyelitis after ankle fracture and initial treatment
Richard, injury → ORIF
After ORIF, osteomyelitis, septic arthritis
2 months
4 months
Bone Transport ankle fusion

Septic arthritis and osteomyelitis with bone loss after trauma
preop

Needs 8 cm lengthening and tibio-talar fusion
Infected
Use beads
15 months

8 cm lengthening

Tibia
Diaphysis
To talus fusion
Repair of distal tibia nonunion and simultaneous ankle fusion

Septic arthritis and osteomyelitis and nonunion after trauma
Infected nonunion pilon
Metaphyseal nonunion and joint arthrosis
Ankle arthrodesis with gradual positioning of the foot

Post-traumatic arthritis with severe rigid equinovarus deformity associated with head injury
Cavovarus
Head injury
Post-trauma
Tibia to Calcaneous ankle fusion with simultaneous lengthening

For failed ankle fusion with necrosis of the talus
Talus excision
IV antibiotics
LLD 3.5 cm
Proximal tibia lengthening
Talus excision
IV antibiotics
LLD 3.5 cm
TC fusion

1” lengthening

TC fusion

03/09/
Distal tibia and fibula osteotomy for lengthening and deformity correction

Malunion of tibia with valgus, shortening, and pain/early arthritis of ankle
25 y/o M, open tibia fx
Boating accident
PREOP

Tibial malunion
15 deg VALGUS
1.5 cm short
Lateral ankle OA and pain
BIG FLAP
4 months
5 months at Frame Removal
5.5 months
LLD = 0

LDTA 90°

ADTA 80°
Osteotomy and gradual correction of a malpositioned ankle fusion and simultaneous lengthening at the proximal tibia
Malposition of ankle fusion

Anterior translation
Calcaneus Dorsiflexion def
LLD- too short
6 months

1 inch lengthening
Gradual correction of an equinus ankle contracture
25 degrees
ankle contracture

we choose the center of the talus as the rotation point

ankle is also inclined 10 degrees off the neutral coronal plane
  – mount ring 10 degrees off neutral
Ankle distraction for ankle arthritis and AVN of the talus
Ankle distraction and re-alignment osteotomy for deformity and ankle arthritis
Ankle distraction with realignment

- Medial plafond defect
- Increases varus
- Osteophyte
- Limits DF
Repair of ankle nonunion with gradual correction of deformity
Altered malleolar relationship
postop 6 weeks
5 months
Thank You