

Foot and Ankle Symposium: Post-traumatic Reconstruction

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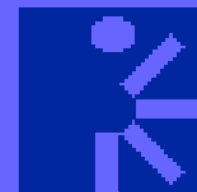
 **HSS**



Limb Lengthening

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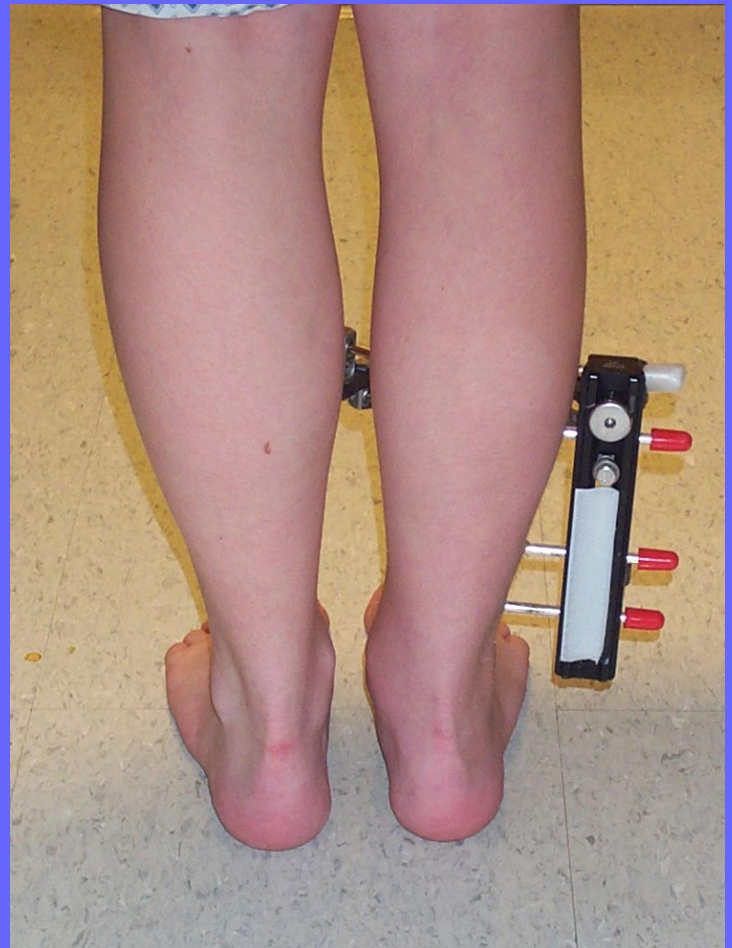
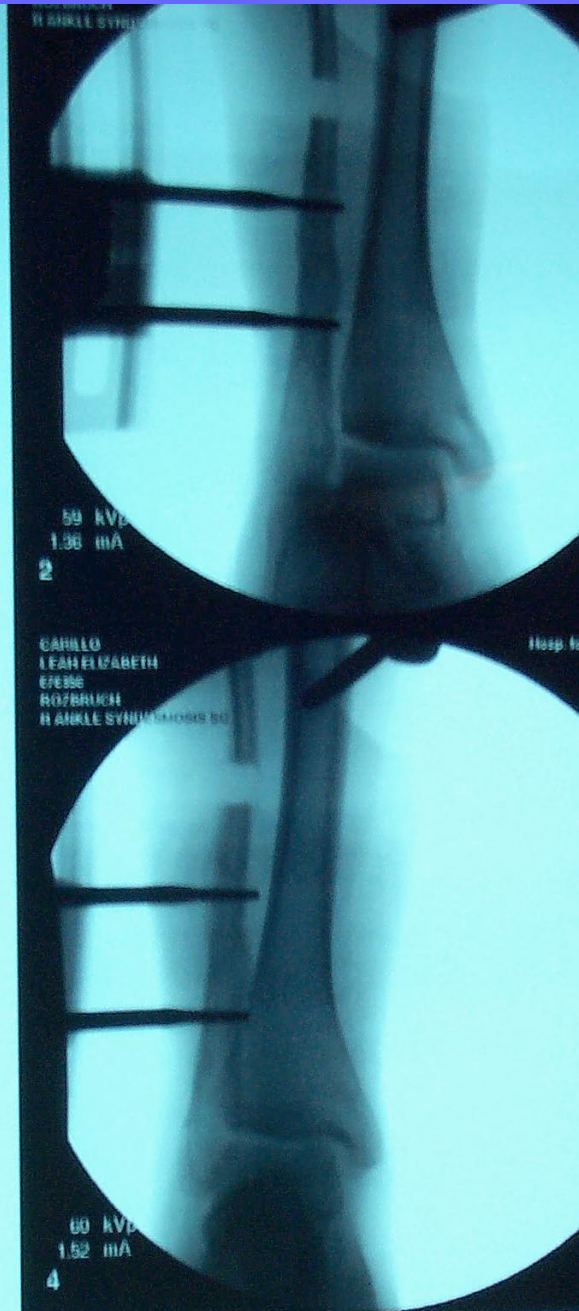


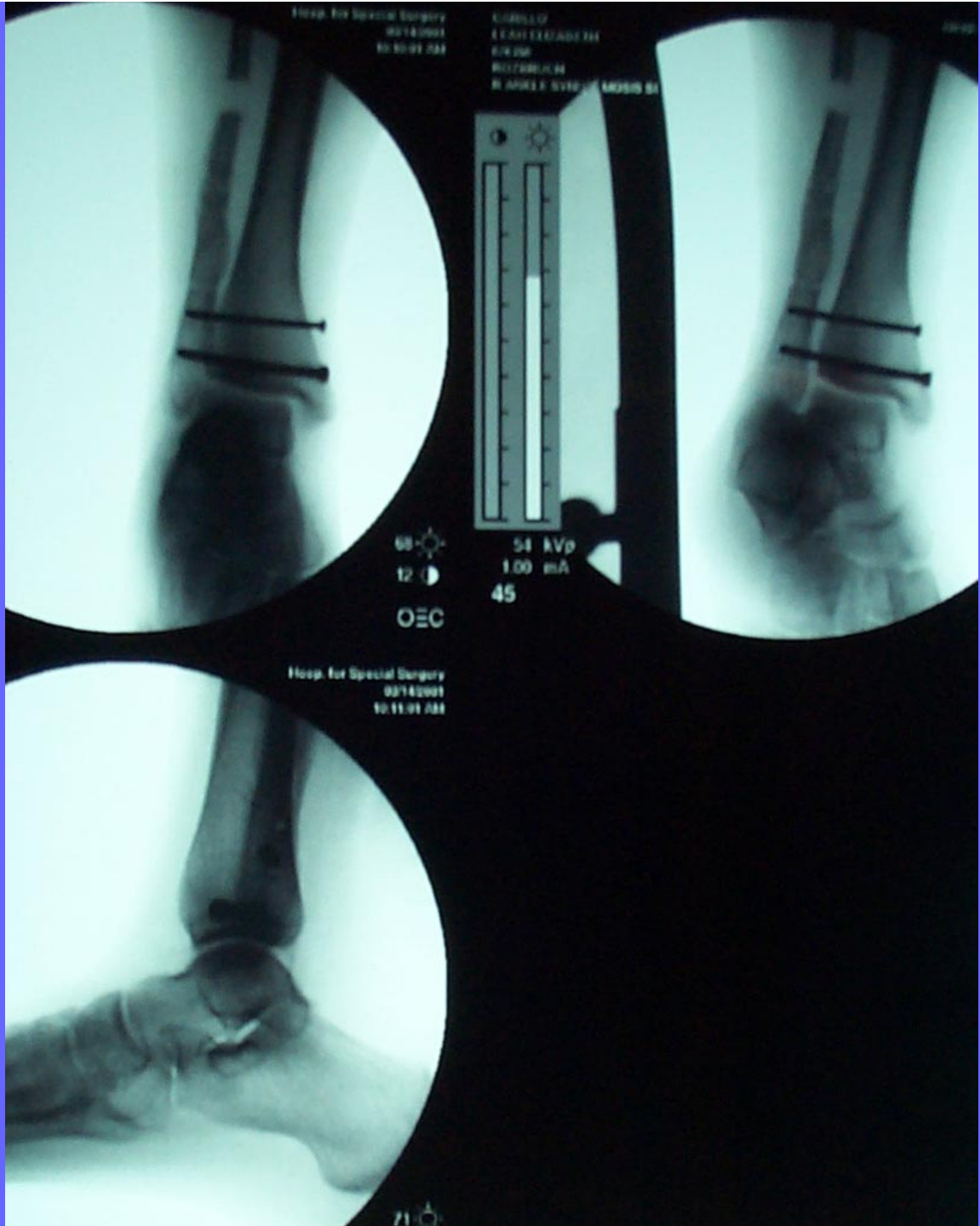
Fibula lengthening

Short fibula



End Distraction, 2weeks





Preop



4 weeks



4 months



Ankle Fusion with Ilizarov Frame

Septic arthritis and osteomyelitis after
ankle fracture and initial treatment

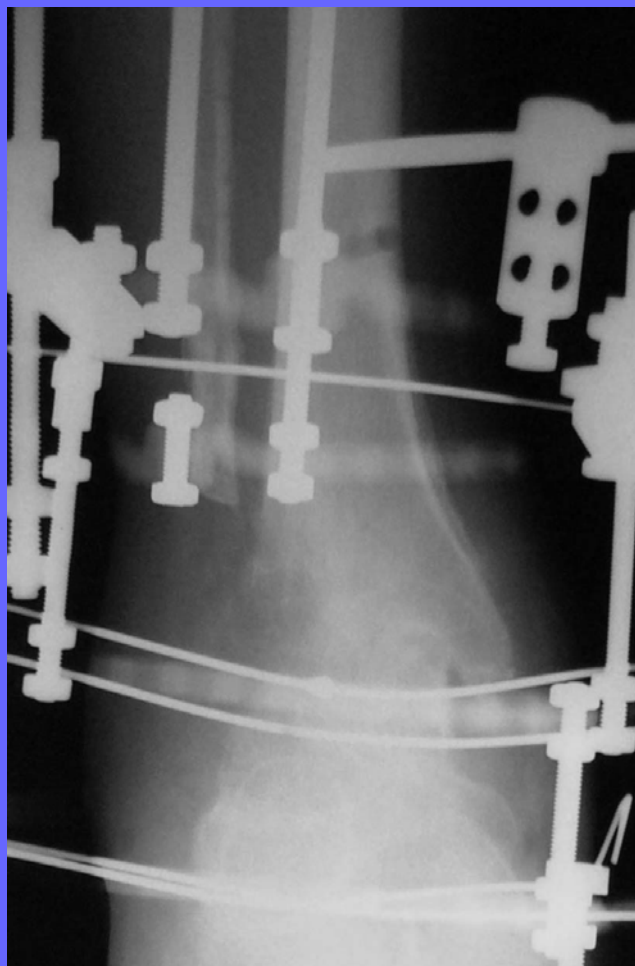
Richard, injury → ORIF



After ORIF, osteomyelitis, septic arthritis



2 months



4 months





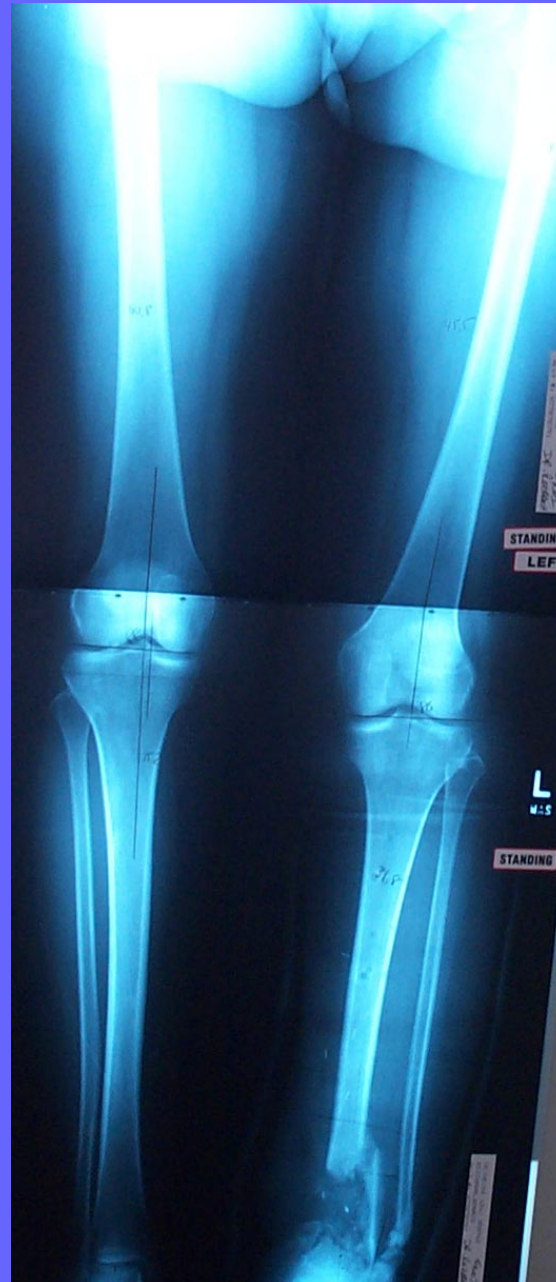
Bone Transport ankle fusion

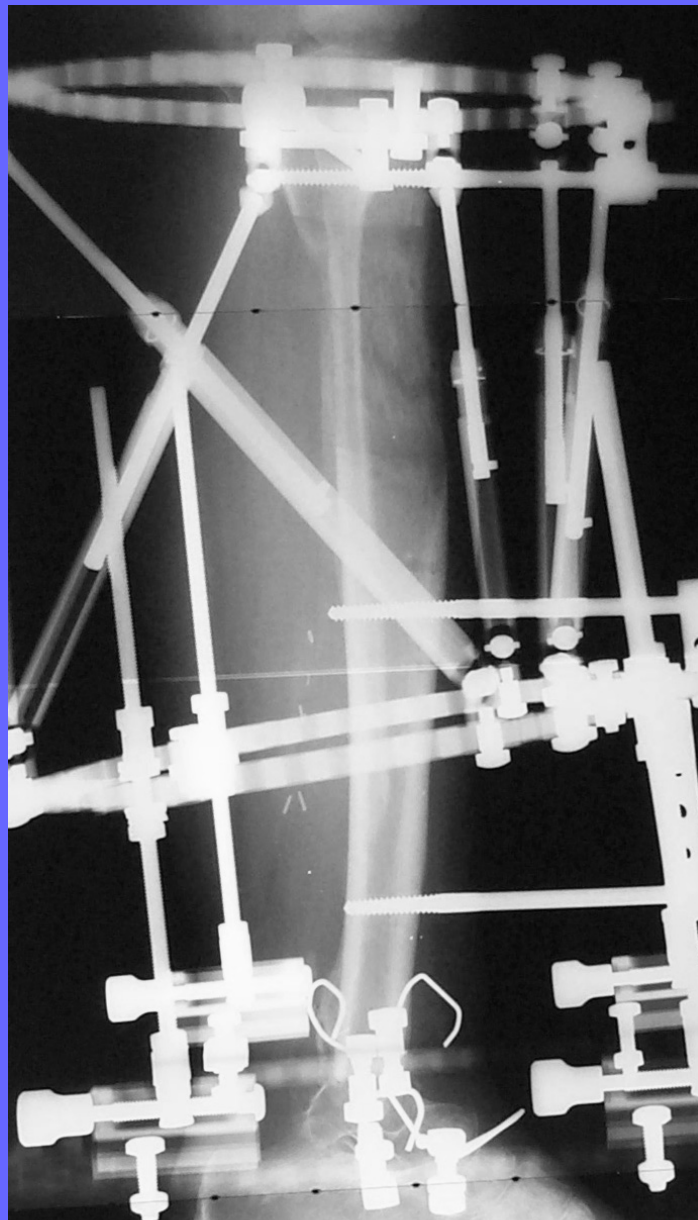
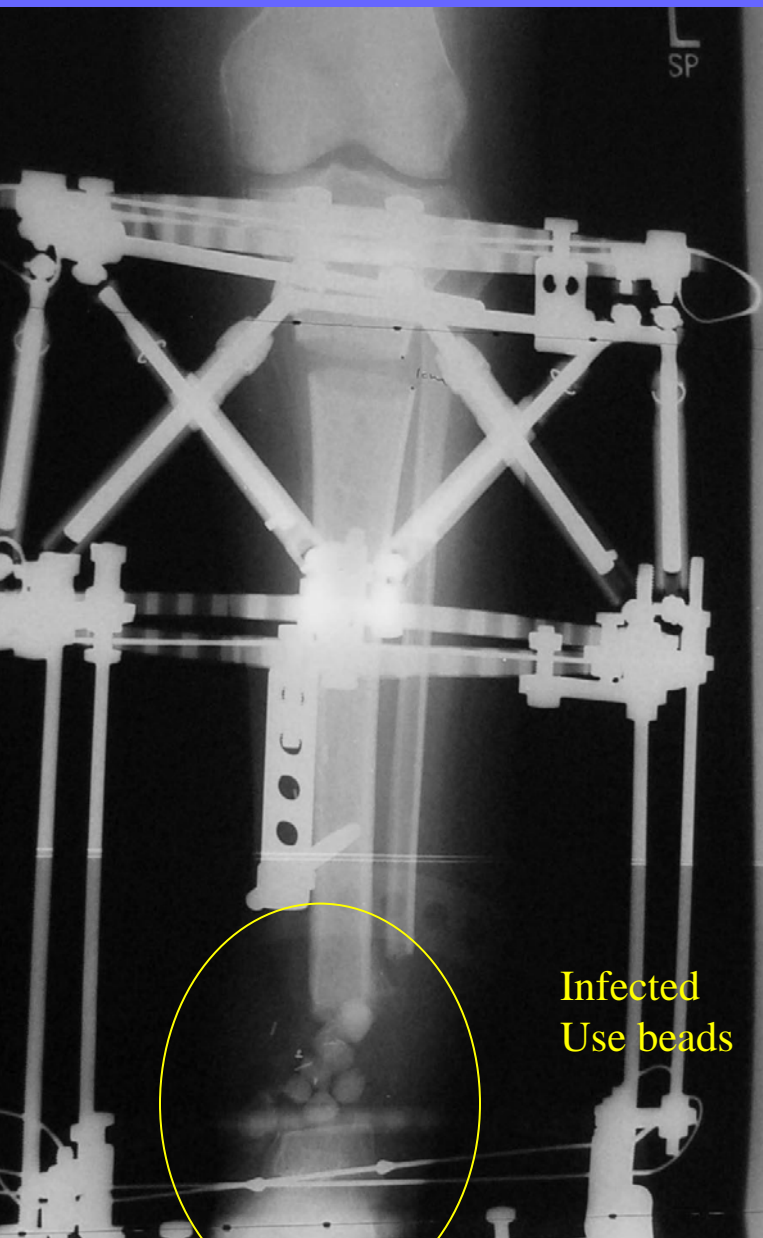
Septic arthritis and osteomyelitis with
bone loss after trauma

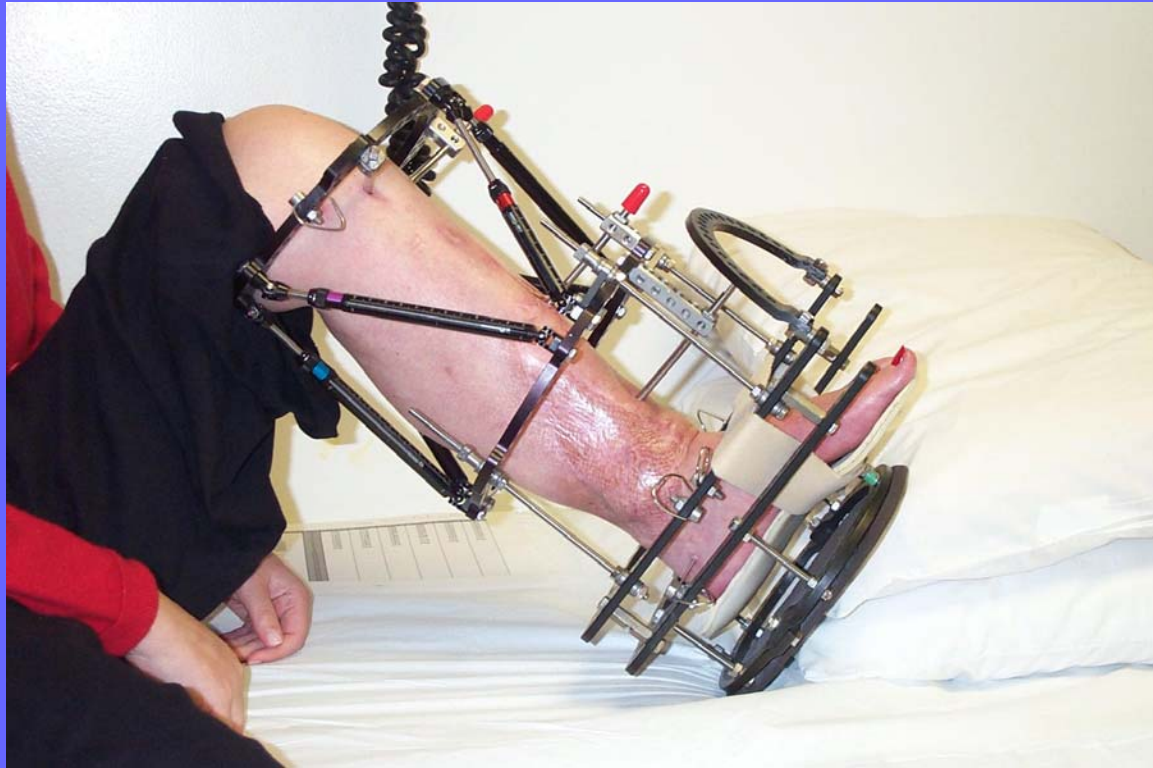
preop



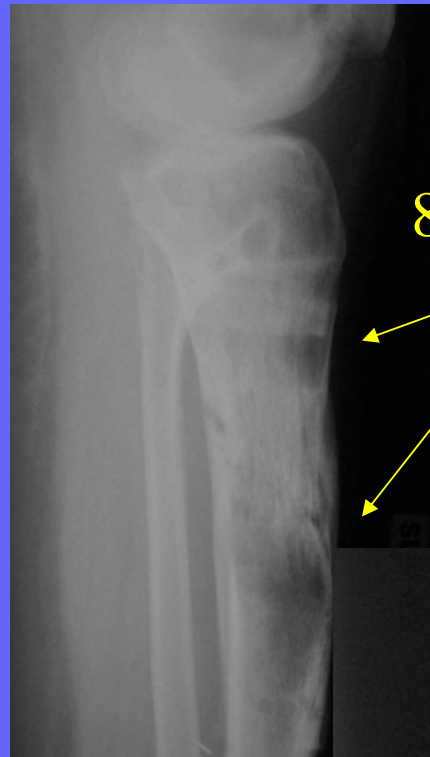
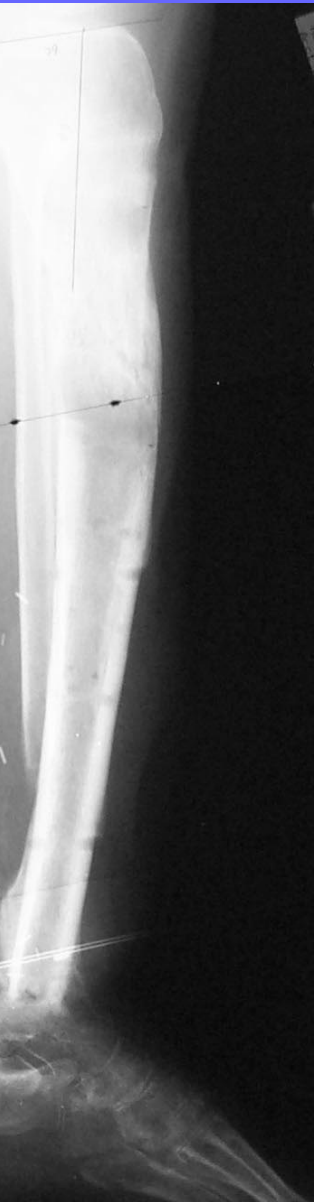
Needs 8 cm
lengthening
and tibio-talar
fusion







15 months



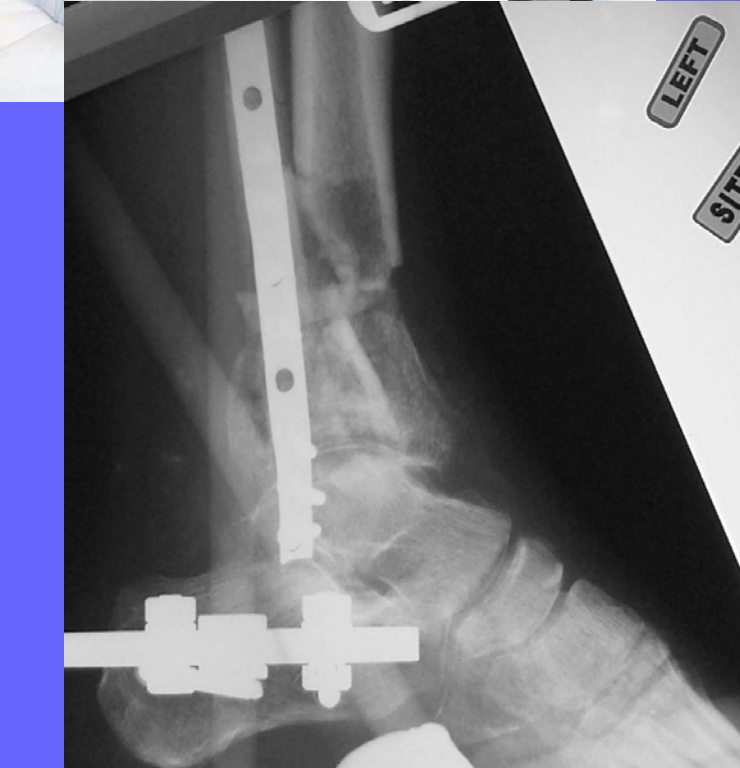
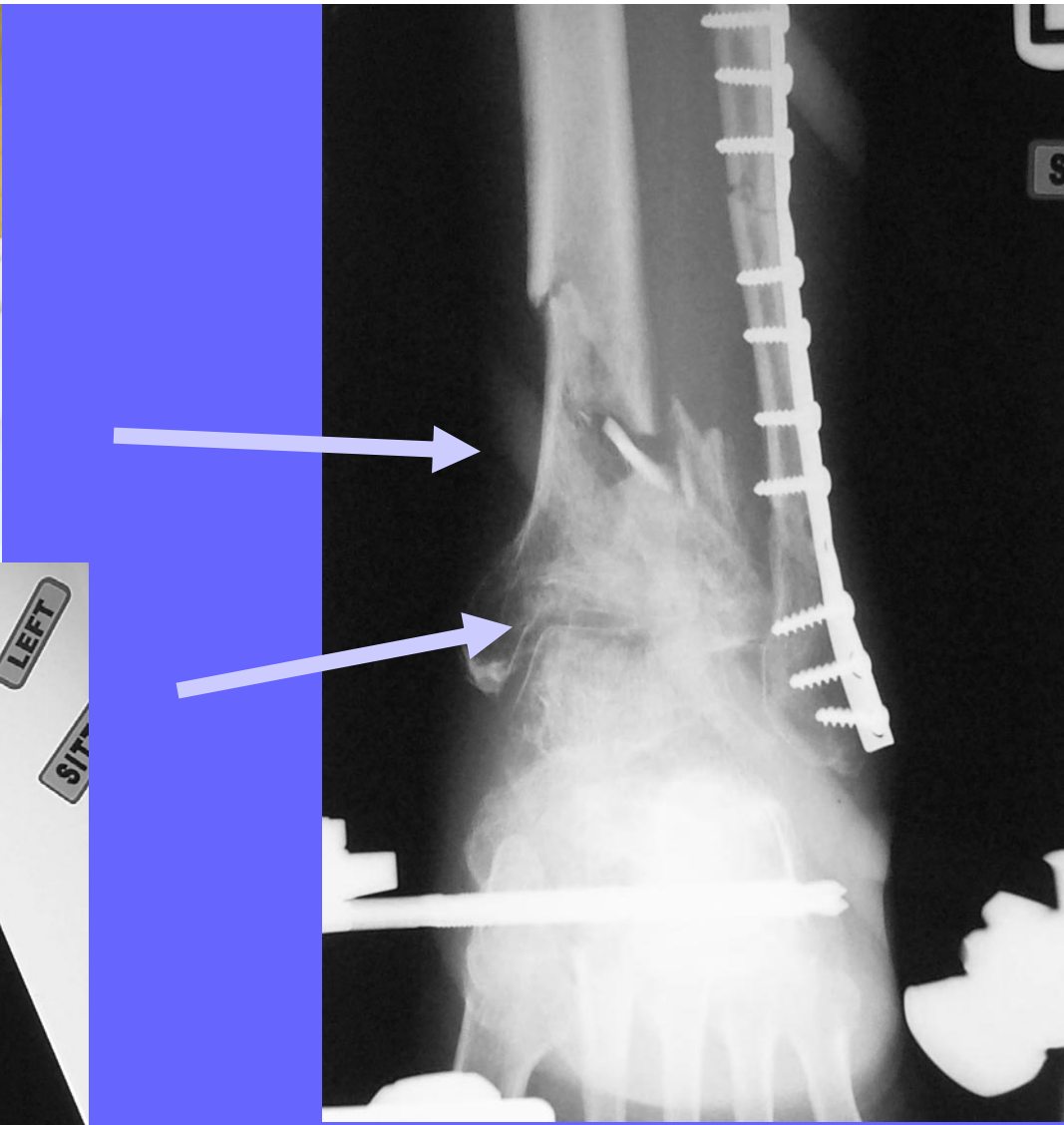
8 cm lengthening

Tibia
Diaphysis
To talus
fusion

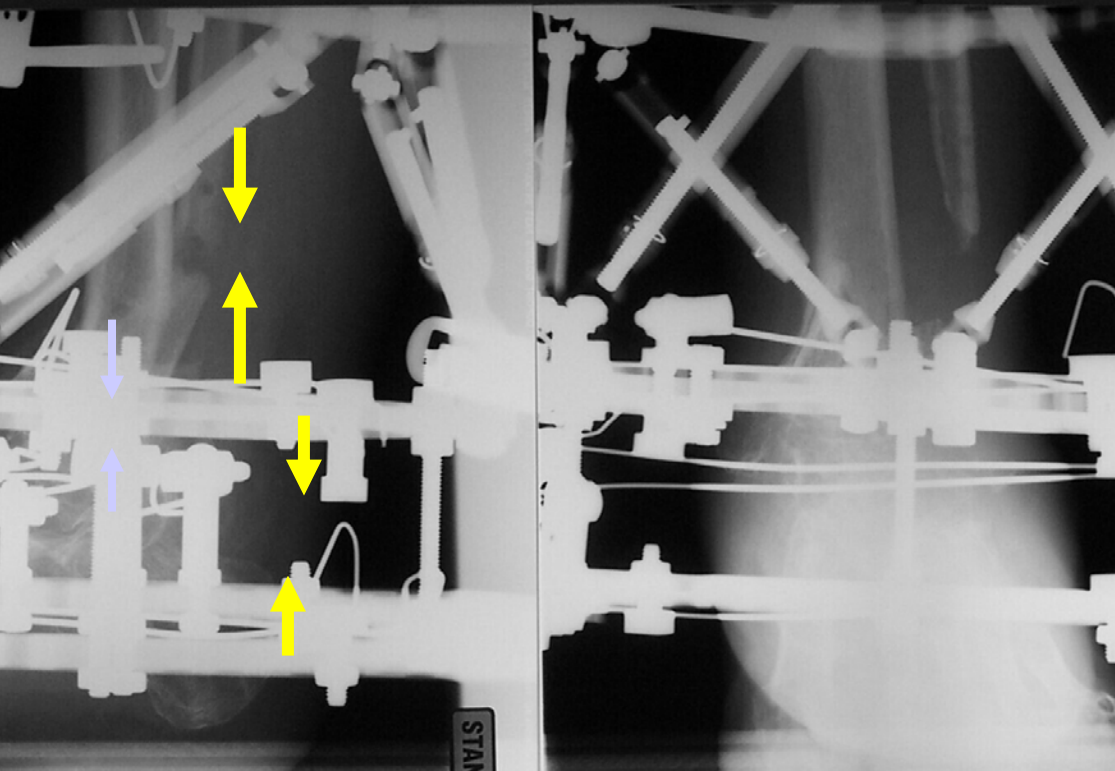


Repair of distal tibia nonunion and simultaneous ankle fusion

Septic arthritis and osteomyelitis and
nonunion after trauma



Infected nonunion pilon
Metaphyseal nonunion and joint arthrosis



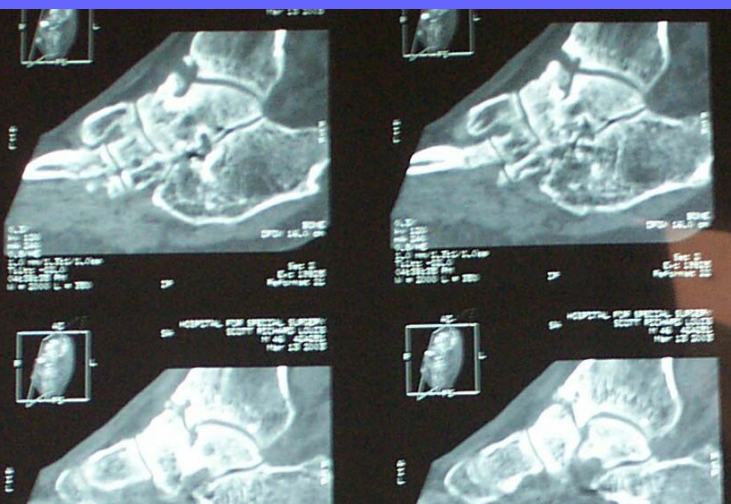


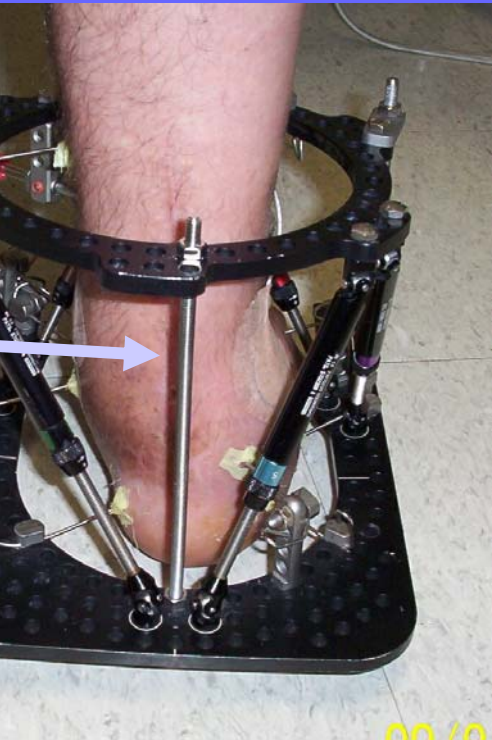
Ankle arthrodesis with gradual positioning of the foot

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

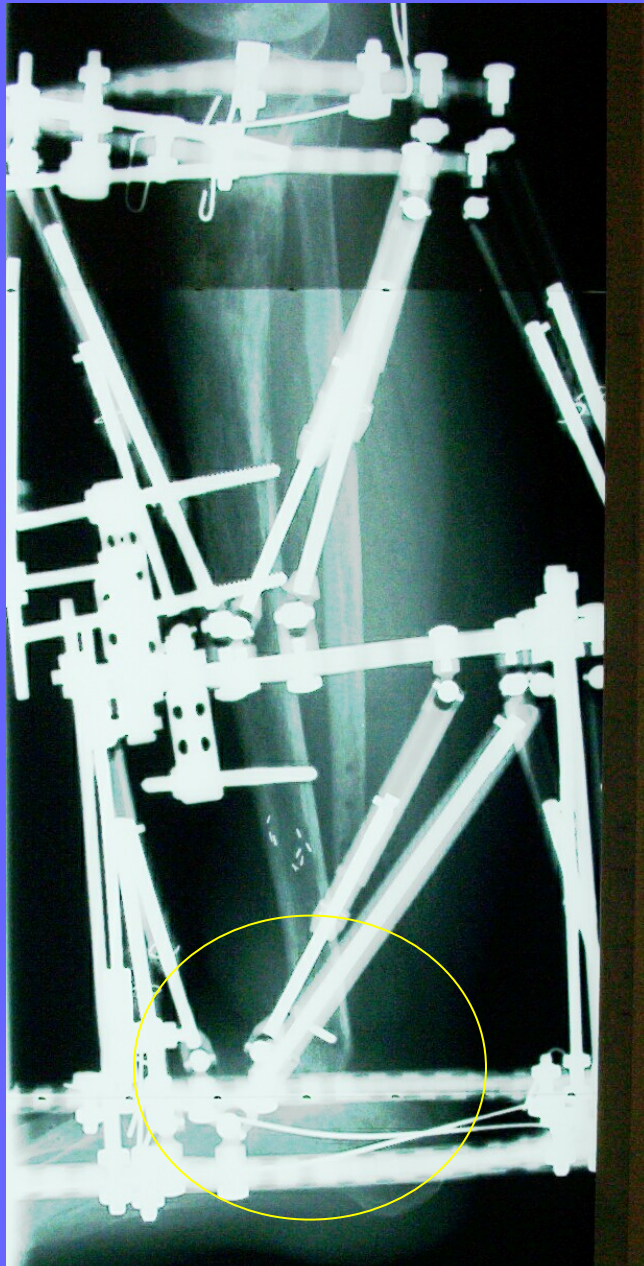




Proximal tibia lengthening

Talus excision
IV antibiotics
LLD 3.5 cm







1"
lengthening

TC fusion

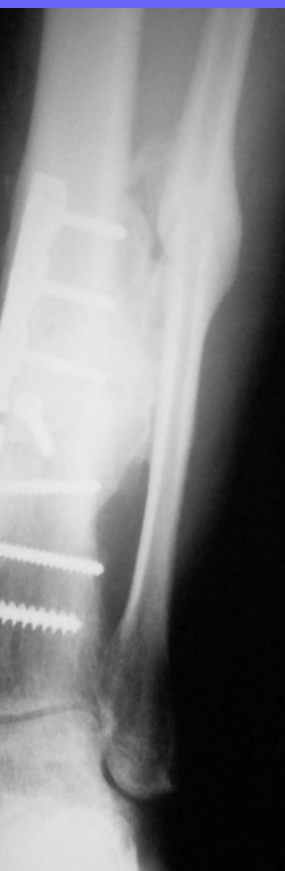
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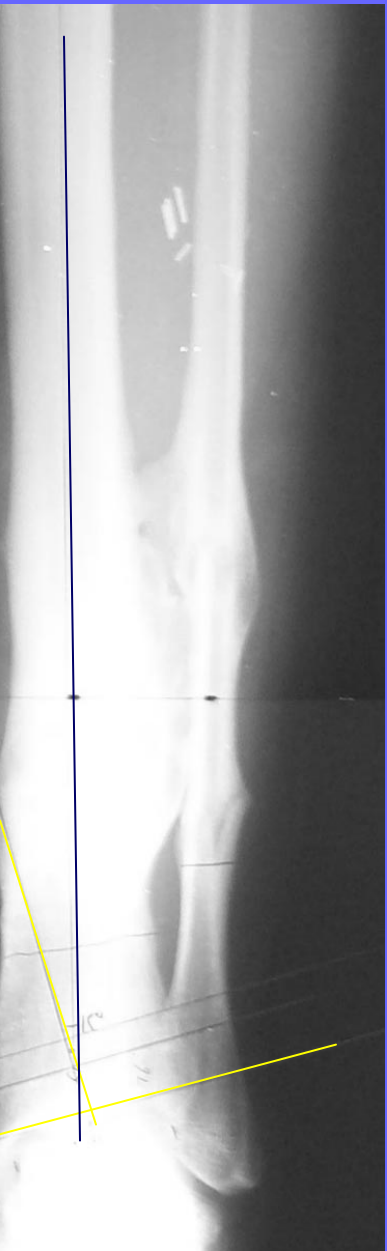


Distal tibia and fibula osteotomy for lengthening and deformity correction

Malunion of tibia with valgus,
shortening, and pain/early arthritis of
ankle

25 y/o M, open tibia fx
Boating accident

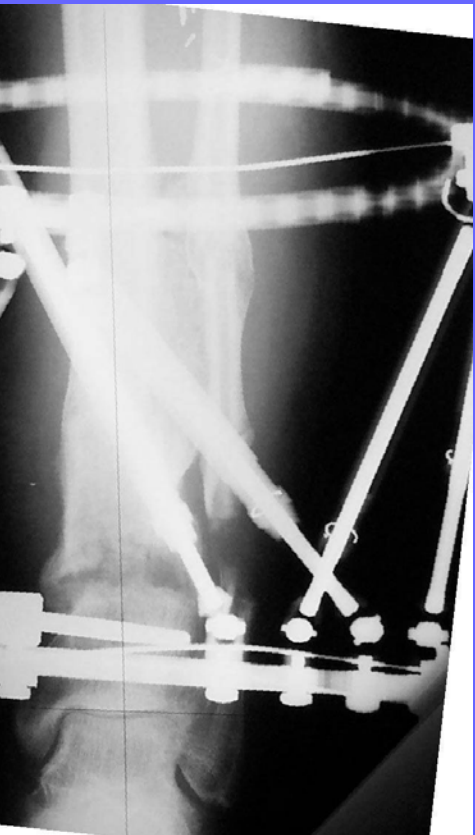




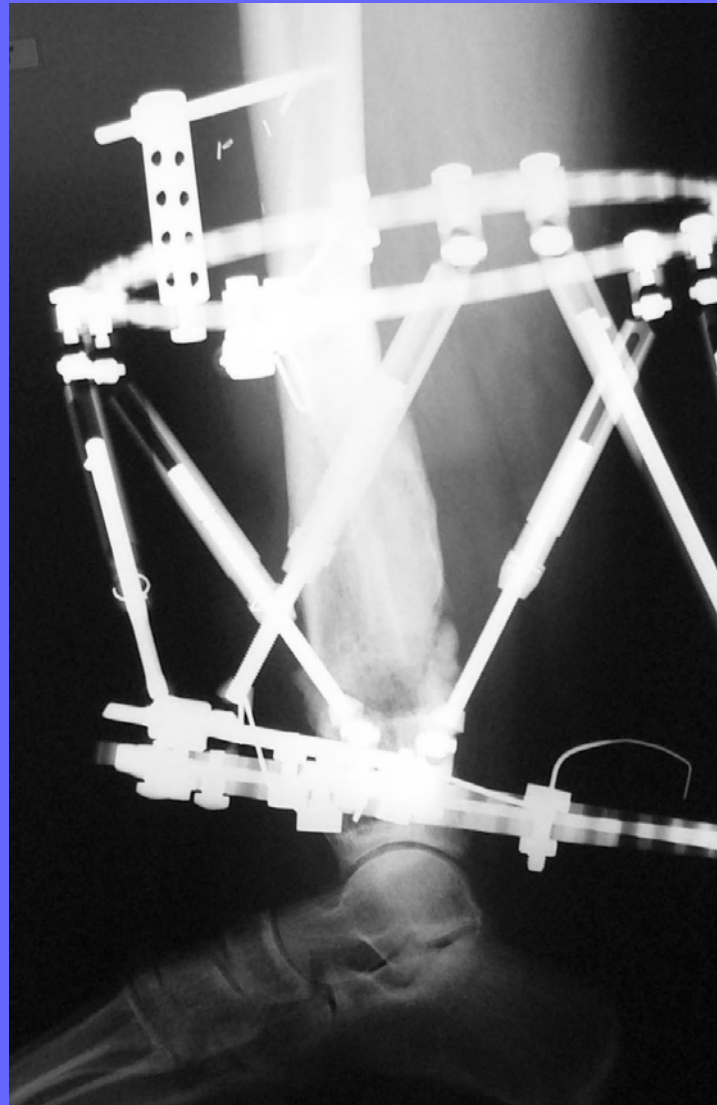
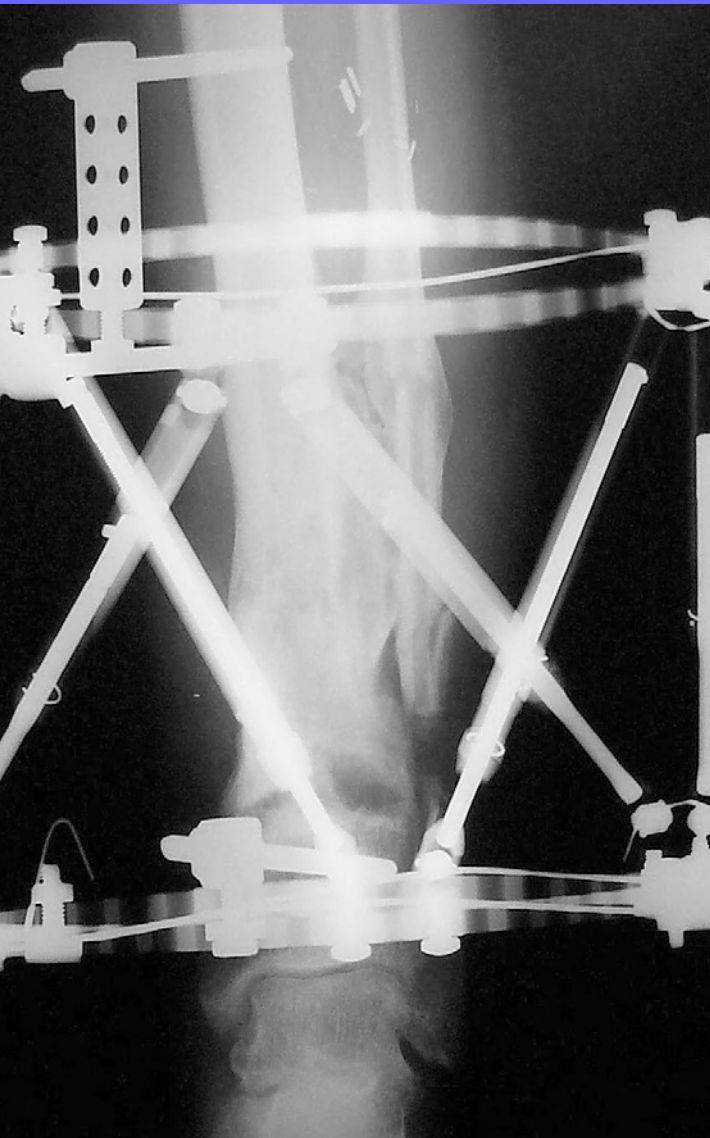
PREOP
Tibial malunion
15 deg VALGUS
1.5 cm short
Lateral ankle OA and pain
BIG FLAP



4 months



5 months at Frame Removal





5.5 months
LLD = 0

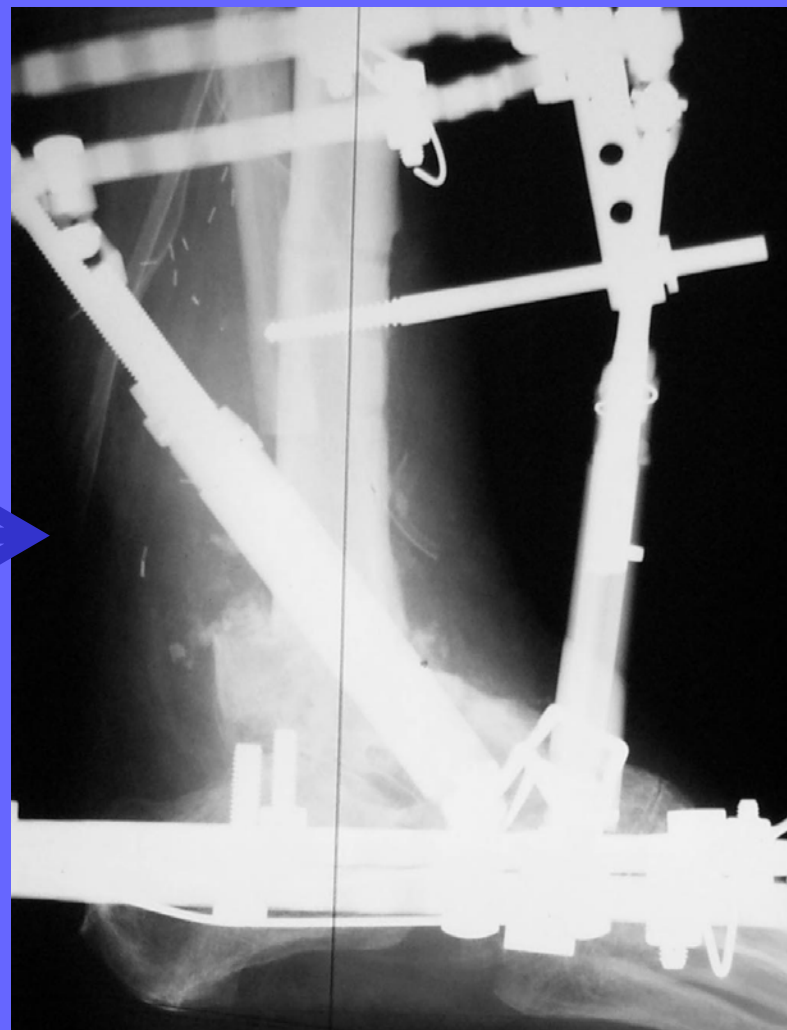
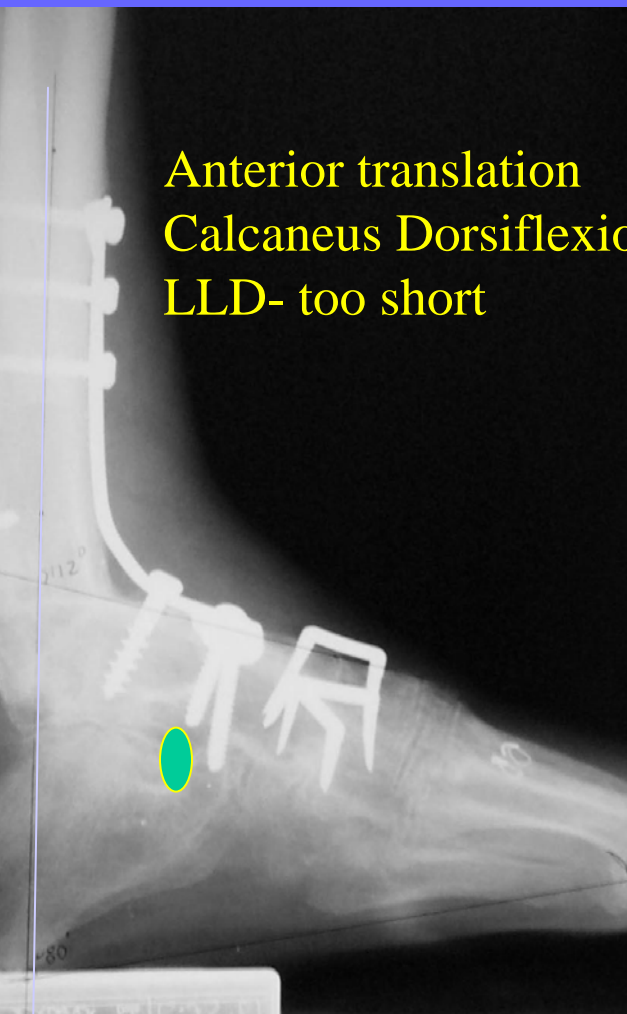


LDTA 90 deg

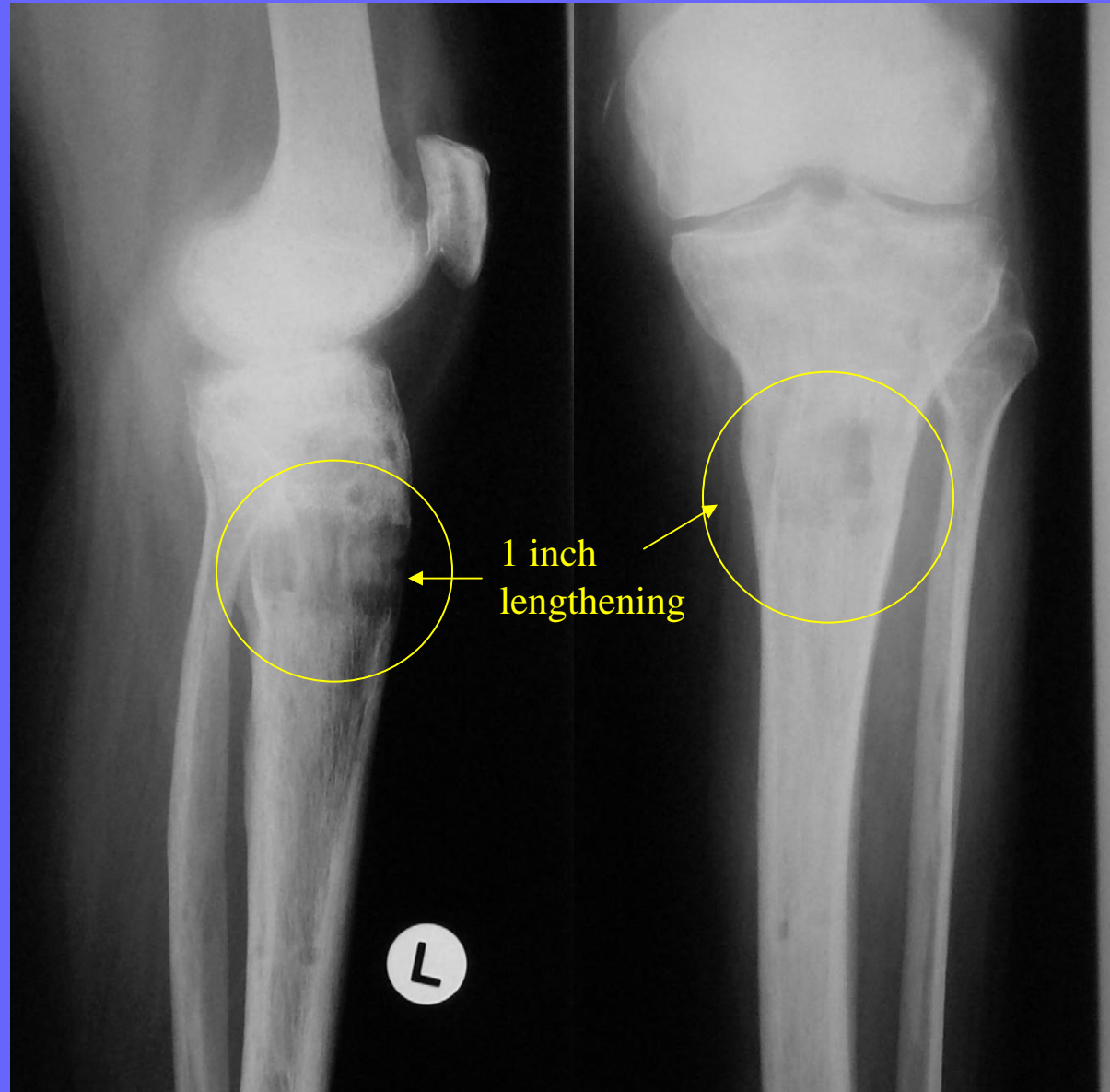
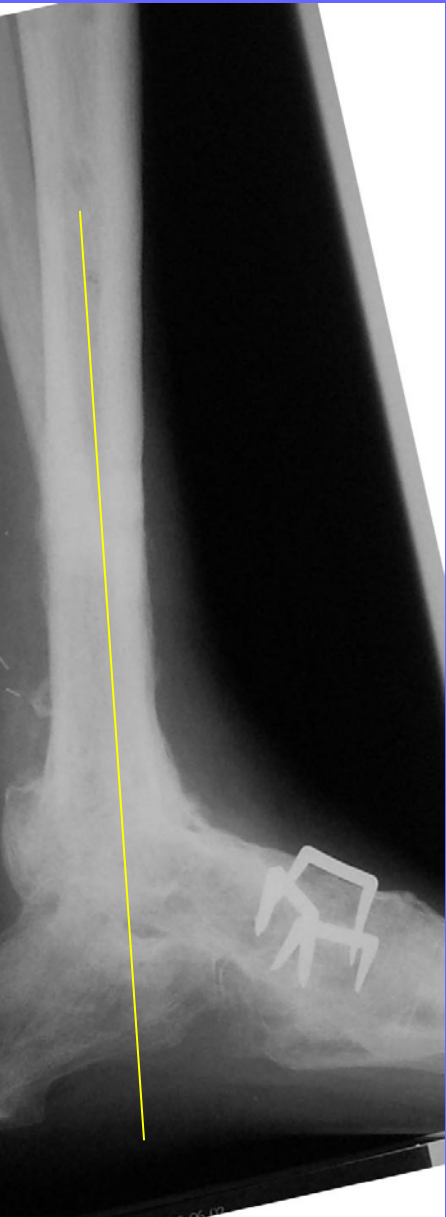
ADTA 80°

Osteotomy and gradual correction of
a malpositioned ankle fusion and
simultaneous lengthening at the
proximal tibia

Malposition of ankle fusion

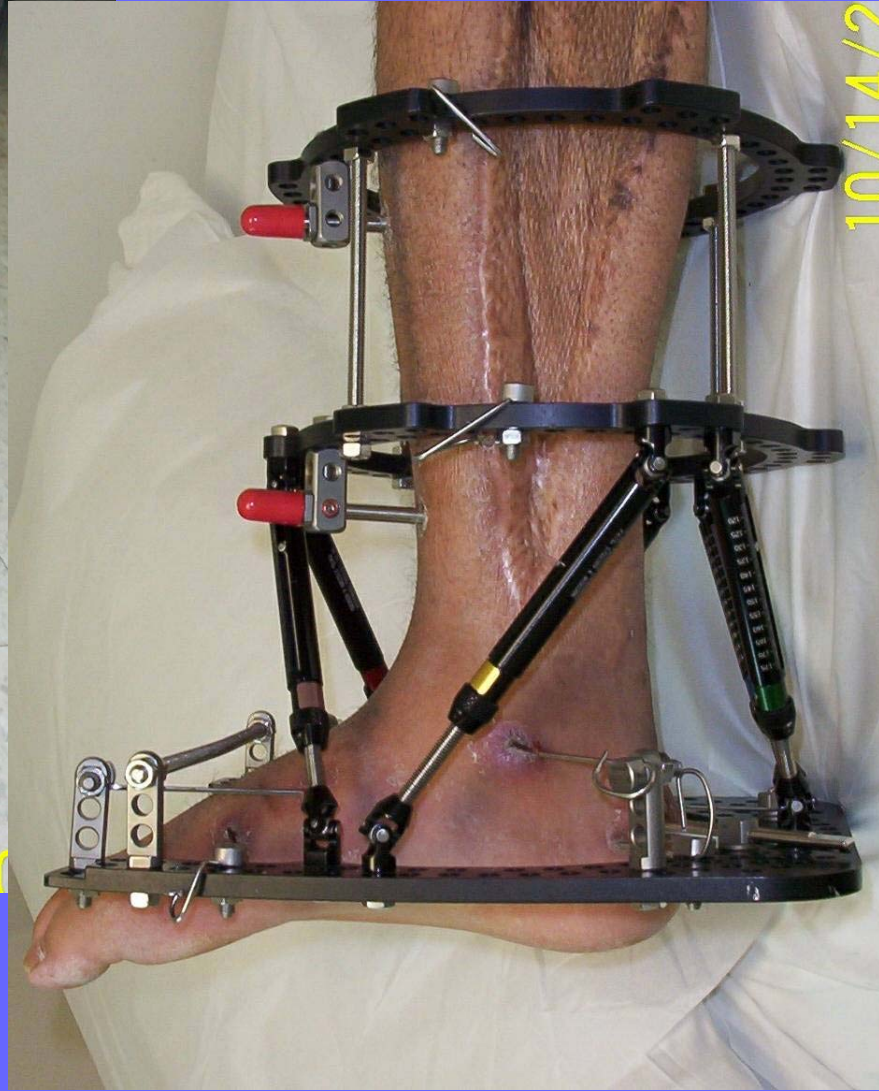
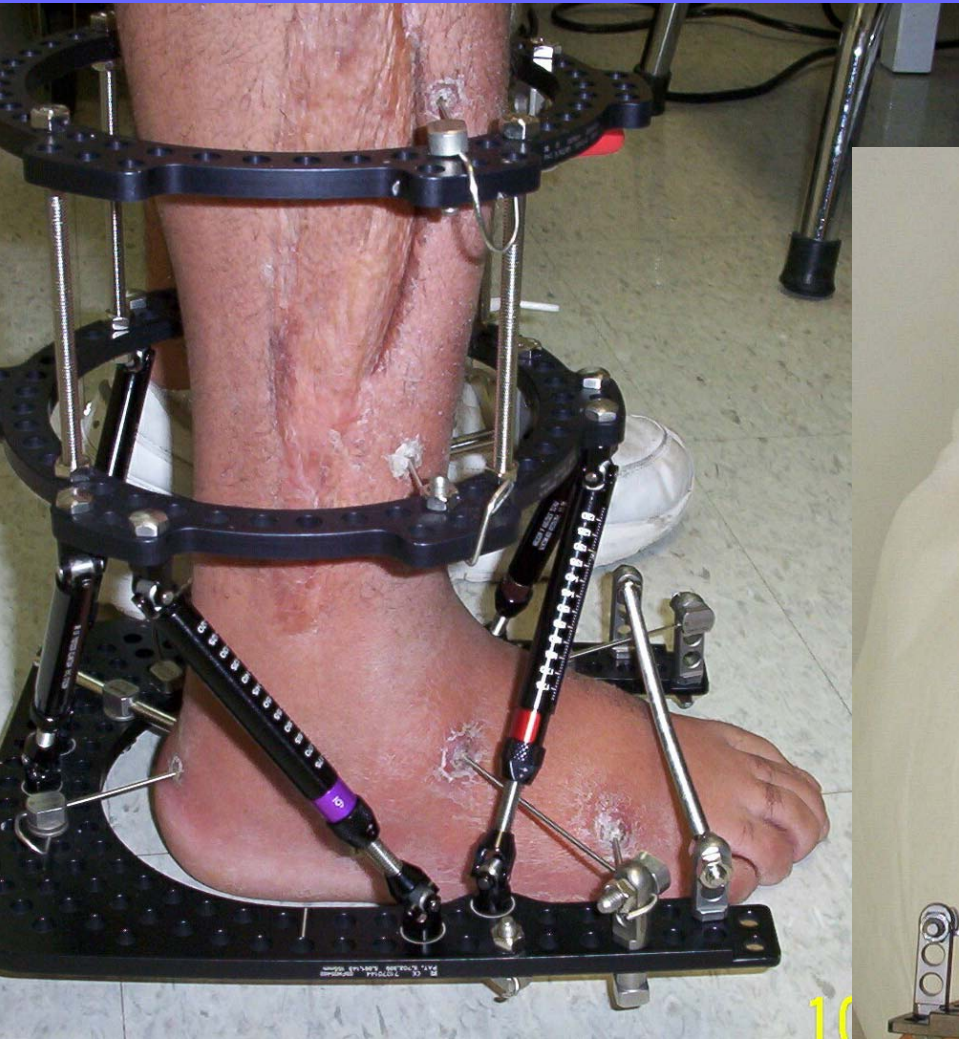


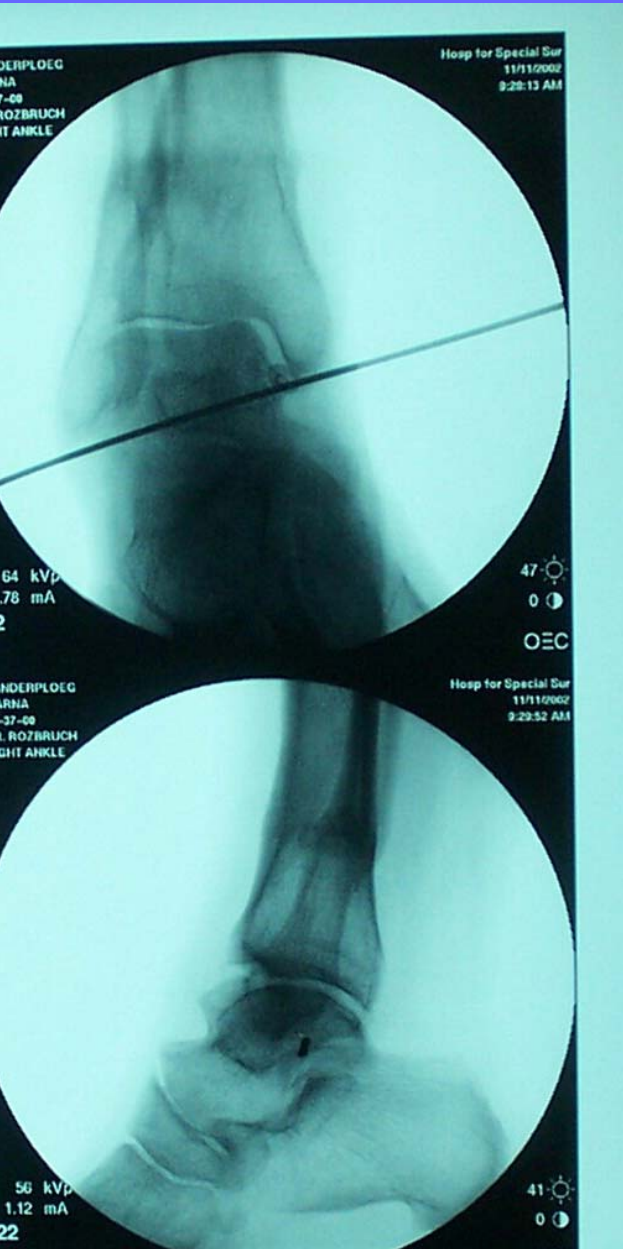
6 months



Gradual correction of an equinus ankle contracture







ankle contracture

we choose the center
of the talus as the
rotation point

ankle is also inclined
10 degrees off the
neutral coronal plane

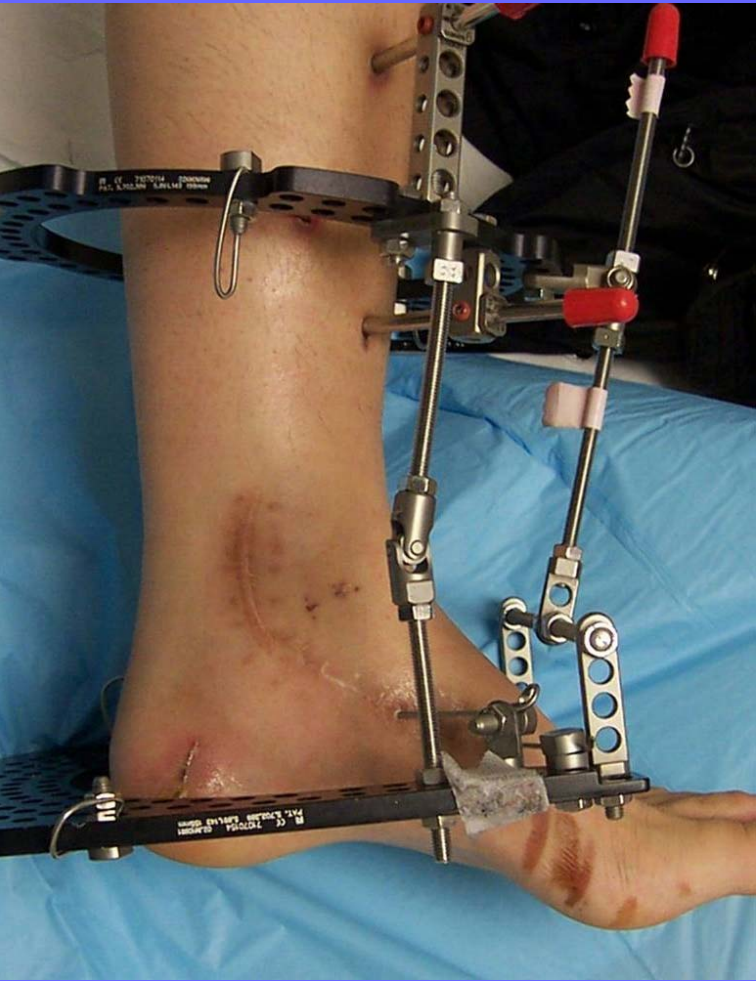
- mount ring 10 degrees
off neutral

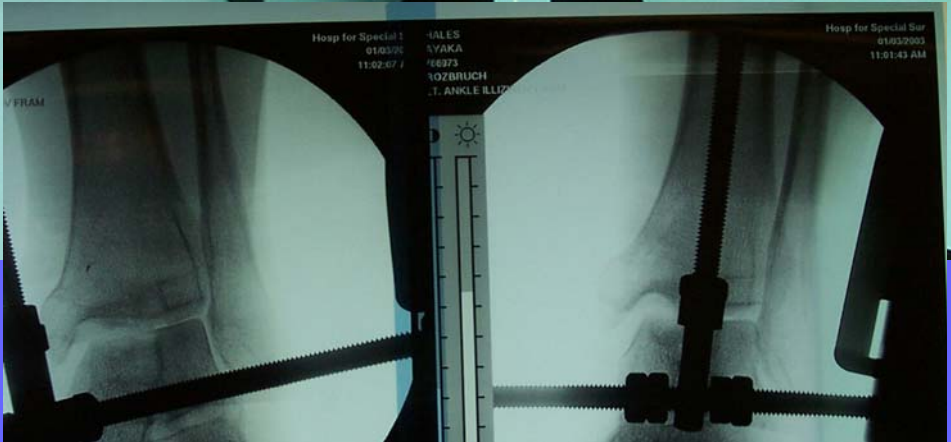
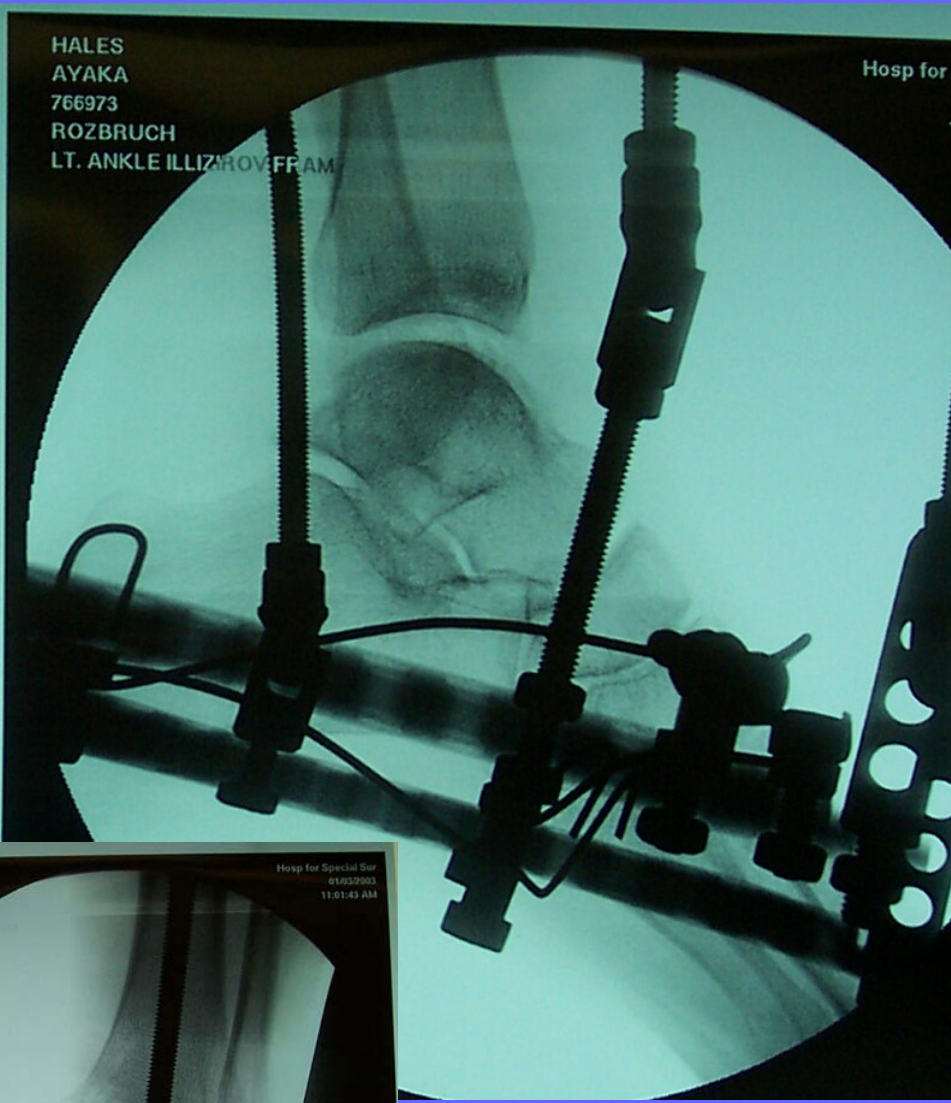


Ankle distraction for ankle
arthritis and AVN of the talus



preop





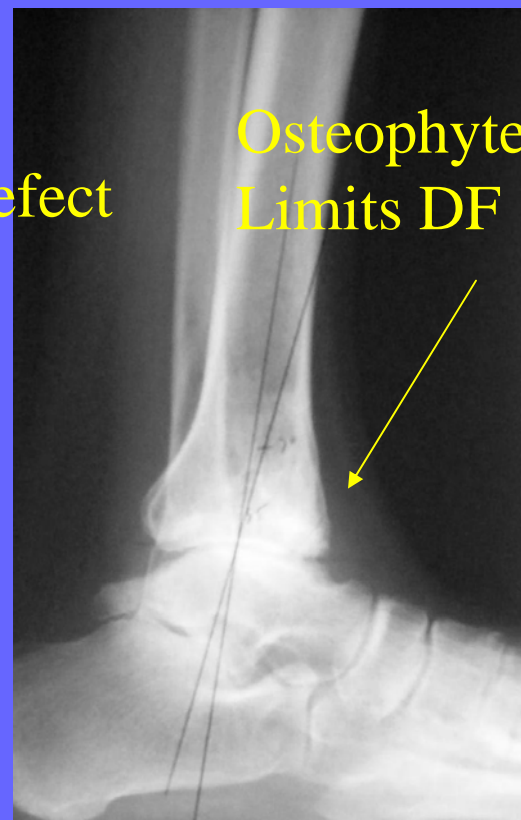


Ankle distraction and re-alignment
osteotomy for deformity and ankle
arthritis

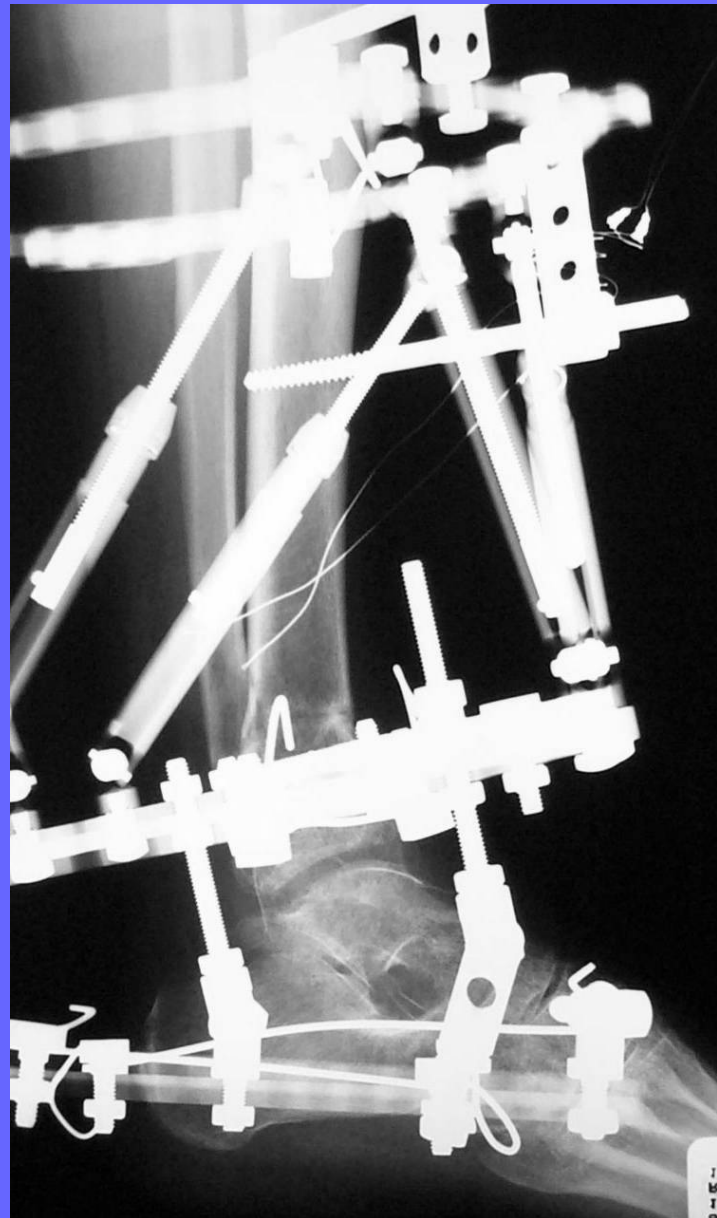
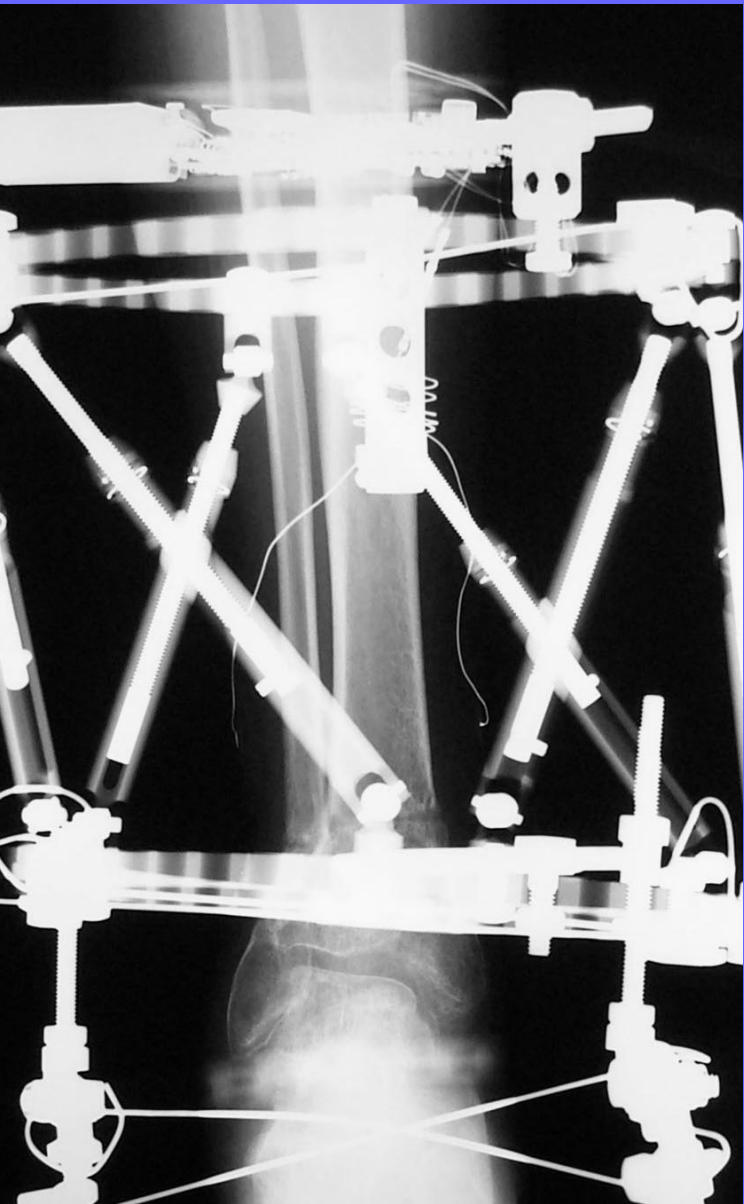
Ankle distraction with realignment

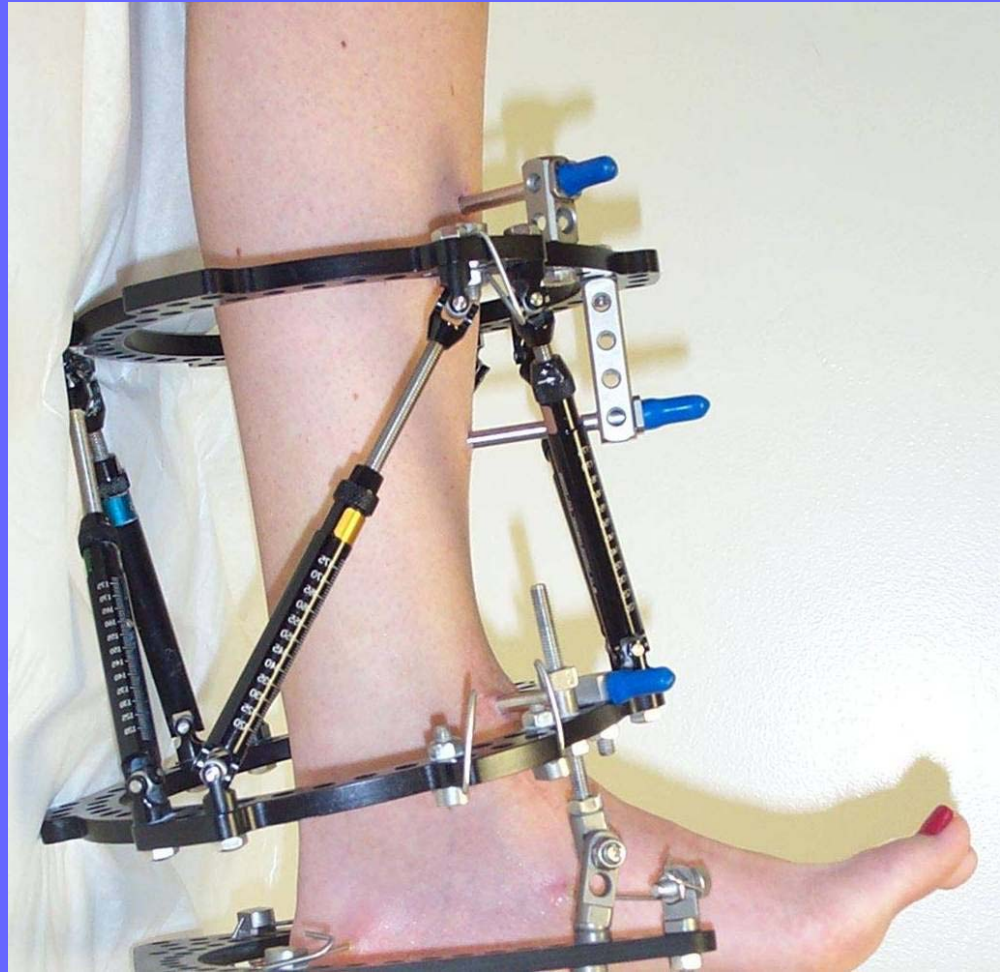
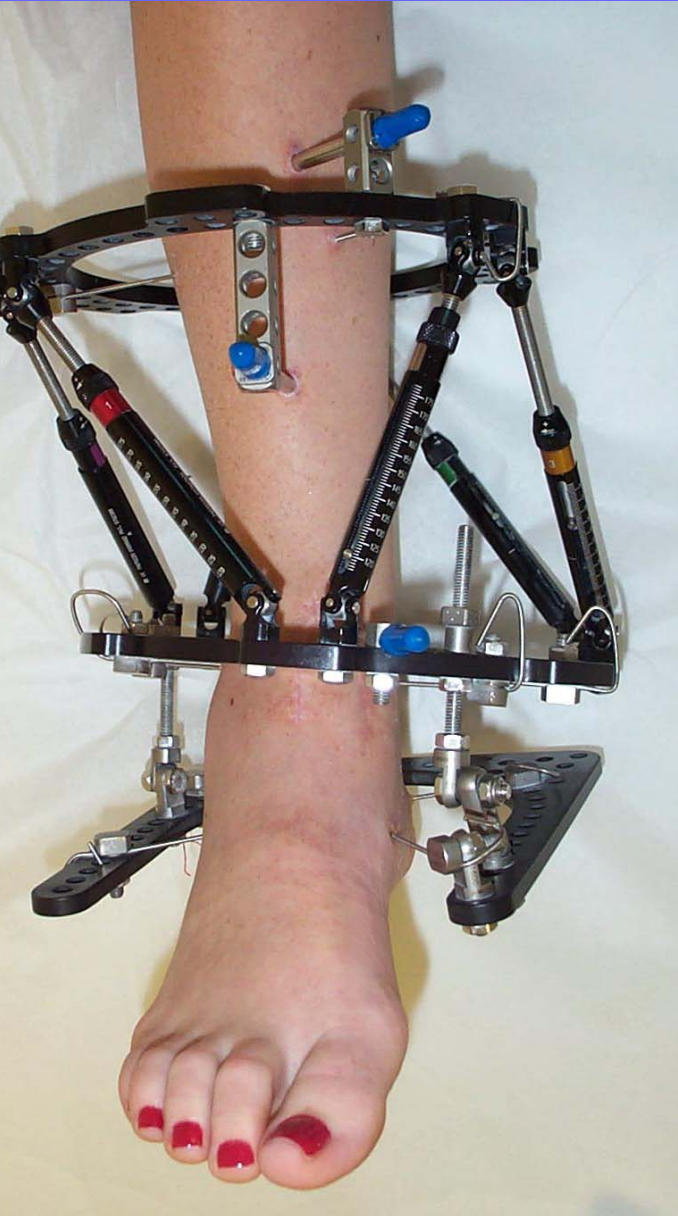


Medial plafond defect
Increases varus



Osteophyte
Limits DF





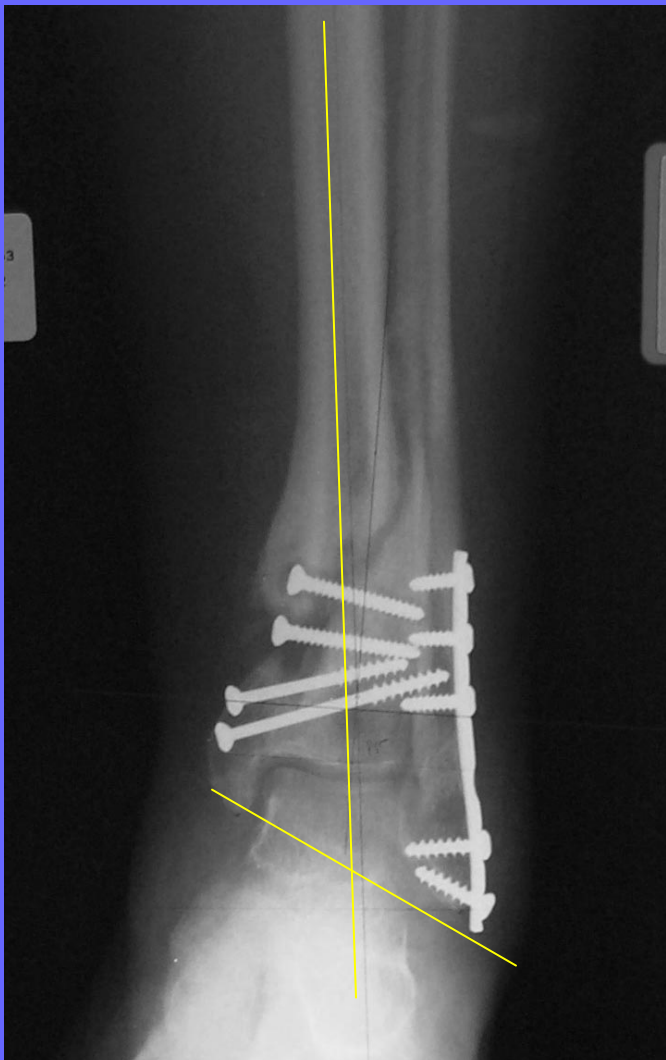


2 years

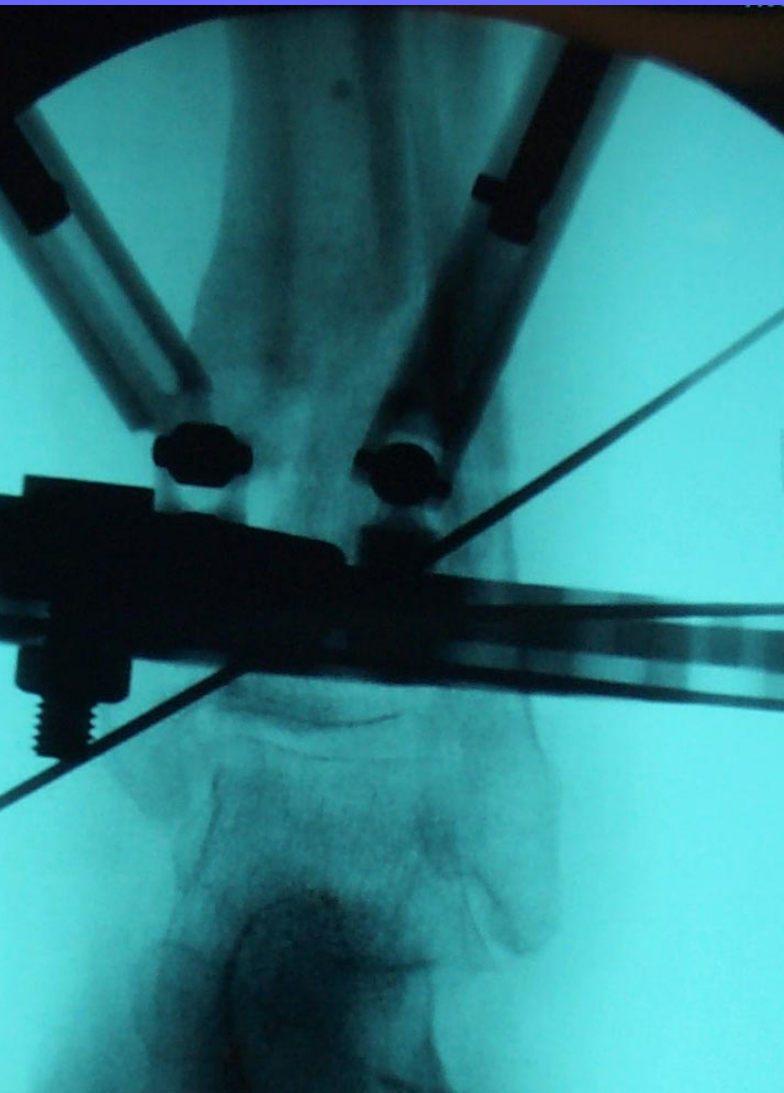


Repair of ankle nonunion with
gradual correction of deformity

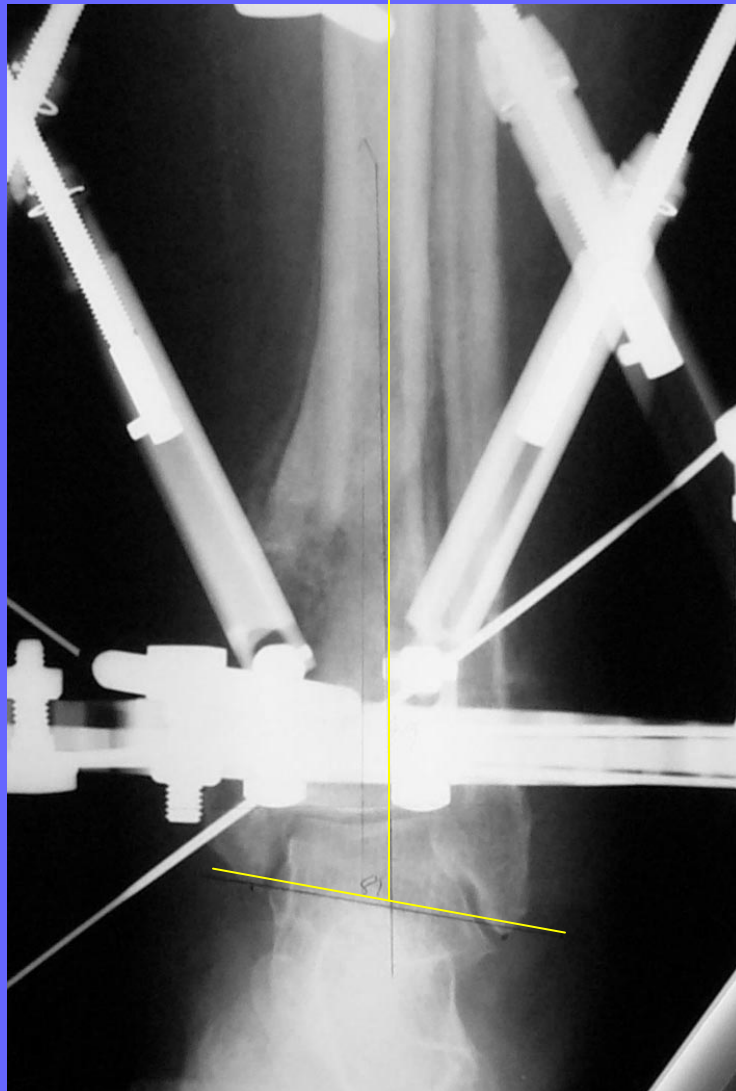
Altered malleolar relationship



postop

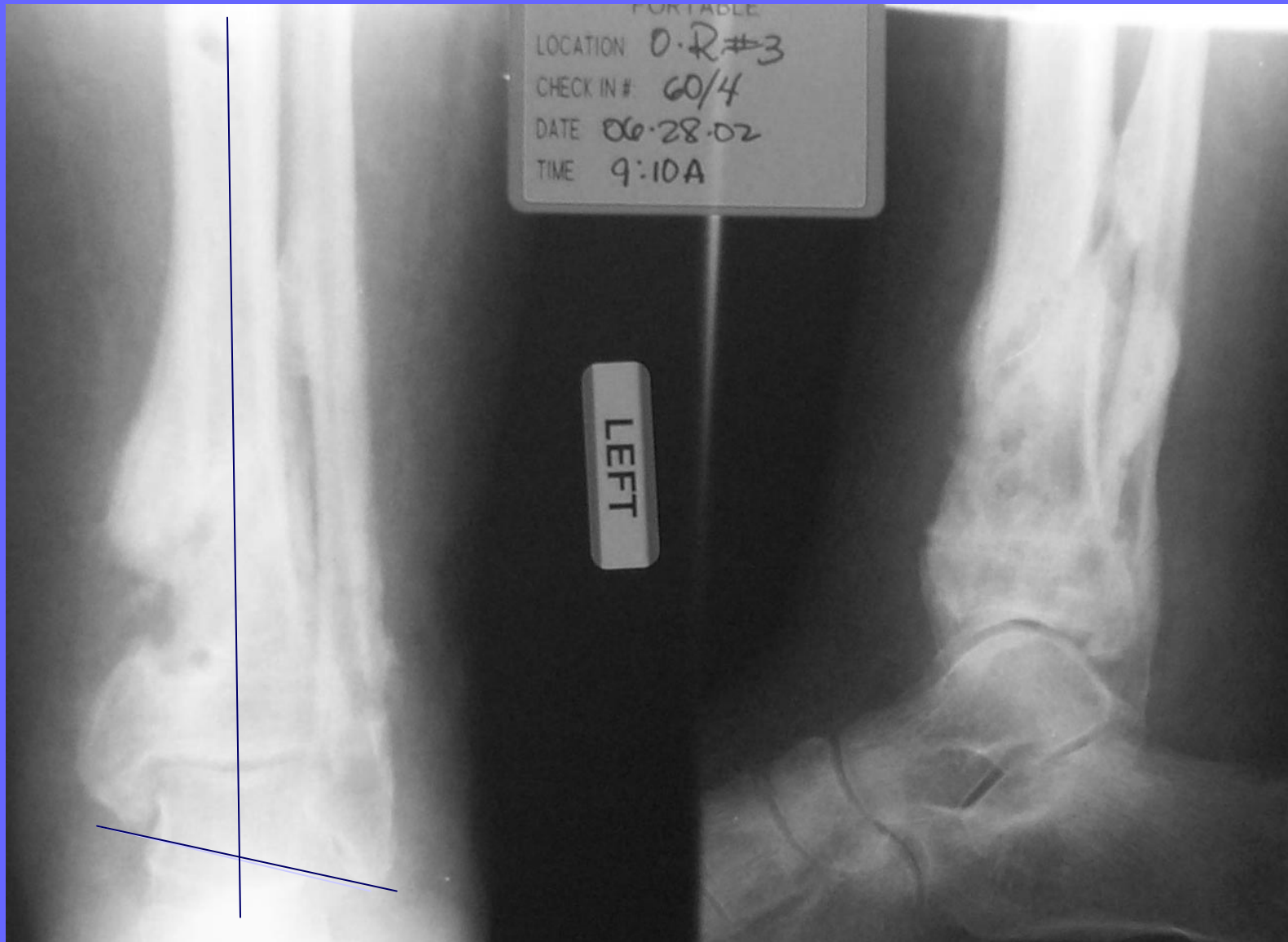


6 weeks





5 months



Thank You

