# Tibial Fractures

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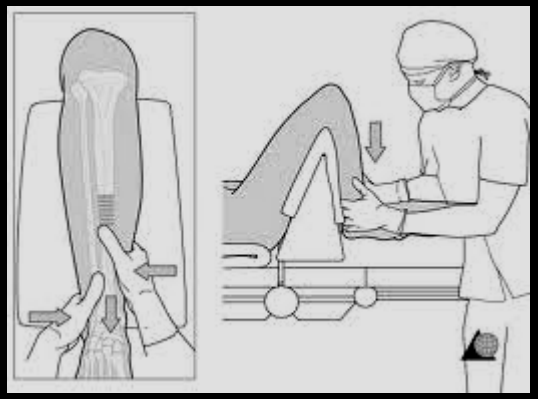
# Reamers

Design feature
Temperature effect

# Patient position

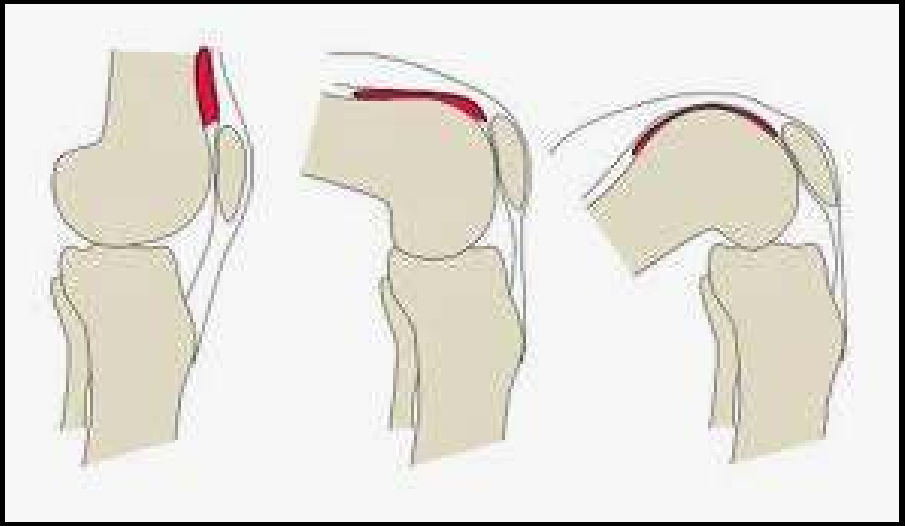


# Tourniquet – yes or no?

Effect on thermal damage to bone

Giannoudis - 2002

# Approach



PT - To split or not

Incision – Tornetta 2007 & Morandi 2010

Entry point on the tibia

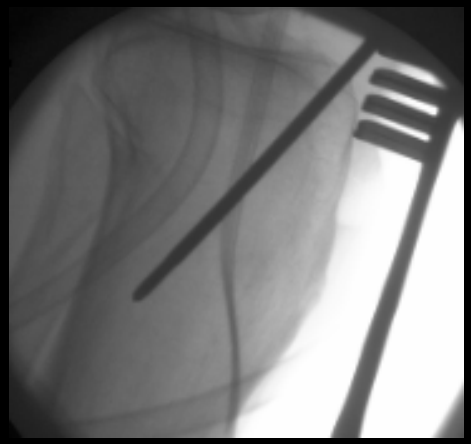
# Current practice in tibial nailing

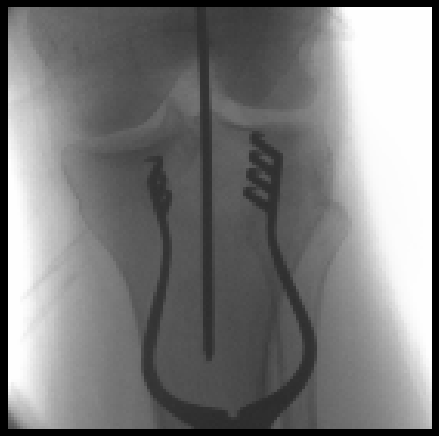
Cross sectional survey of OTA,AAOS,AOI - 444 surgeons
Tourniquet use in tibial nailing / Tendon split or paratendinous

-Tourniquet use in tibial nailing 52%
- Tendon split or paratendinous 30:70
- High or low pressure lavage 39:61
- Tourniquet Asia/Africa:USA::10:1
- Tendon Split Australia, Europe, South Am
- Consensus on IV antibiotics / Wound irrigation

Bhandari J Trauma -Injury 2000

# Entry point





# Traction table and Compartment pressure

- Highest pressure recorded
- Mullett et al 2001

  - 17/626 all treated on traction table

# Proximal and Distal third fractures

- Proximal
  - Valgus in coronal plane
  - Flexion in sagittal plane (Apex anterior
  - Post translation of distal fragment
- Distal – Varus/Valgus mal-alignment
  - Block screw.

# Distal third fractures - 1

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# Distal third fractures - 2

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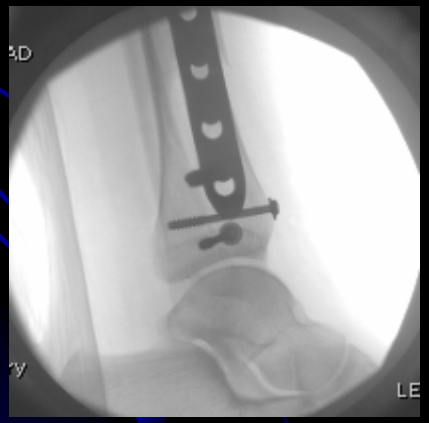

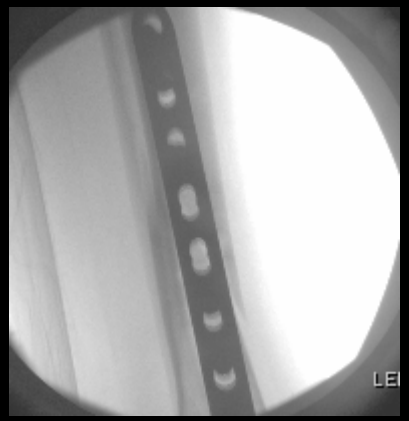

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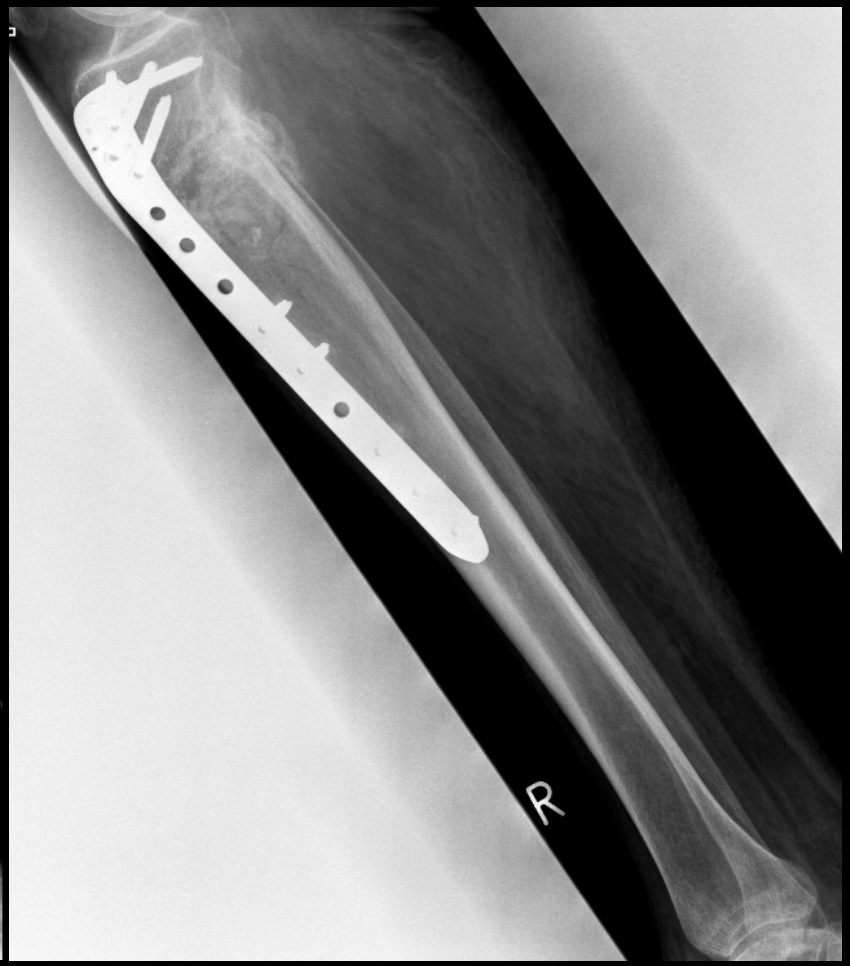
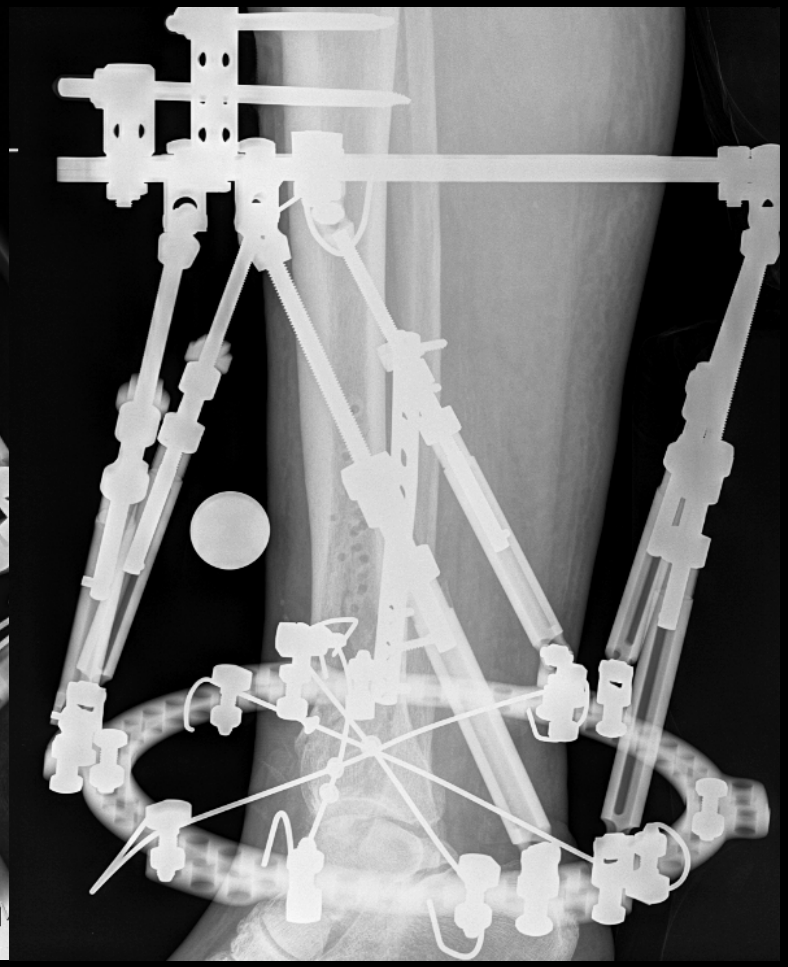


# Day 1

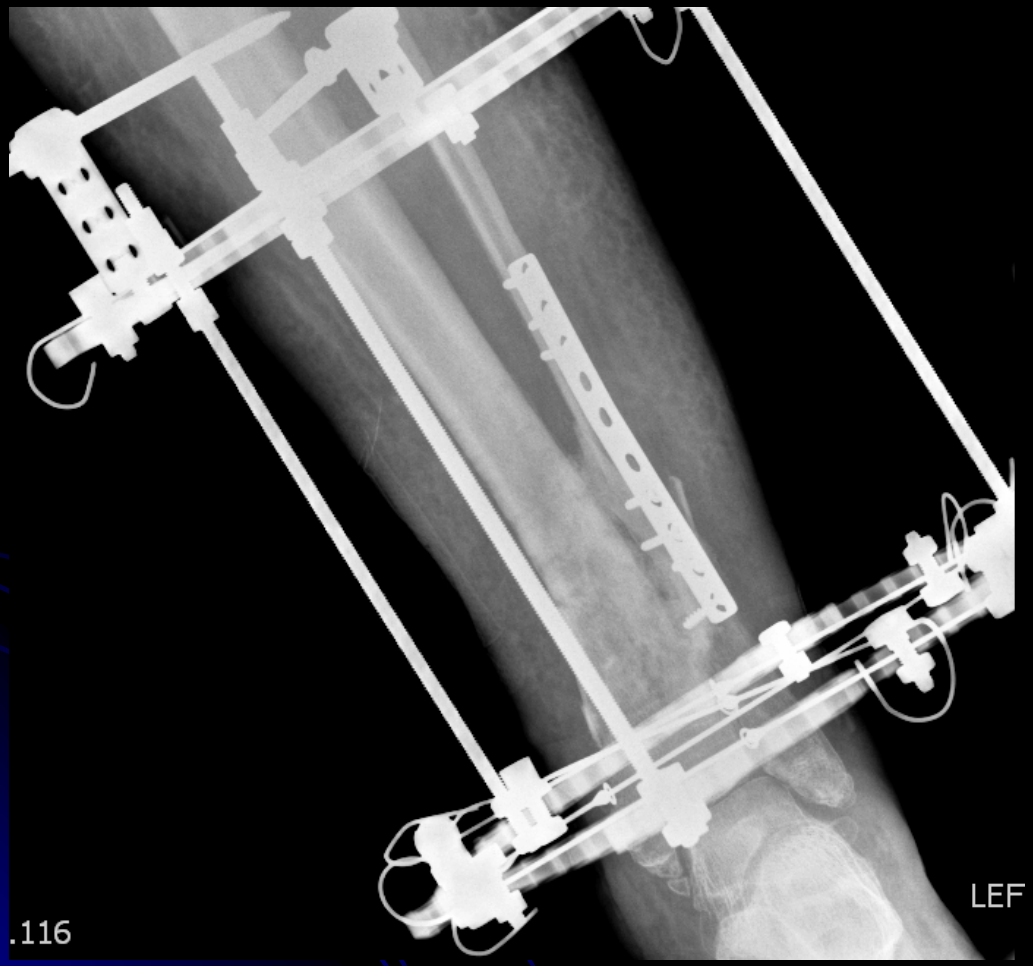
# Day 2

# Day 6

# Day 18

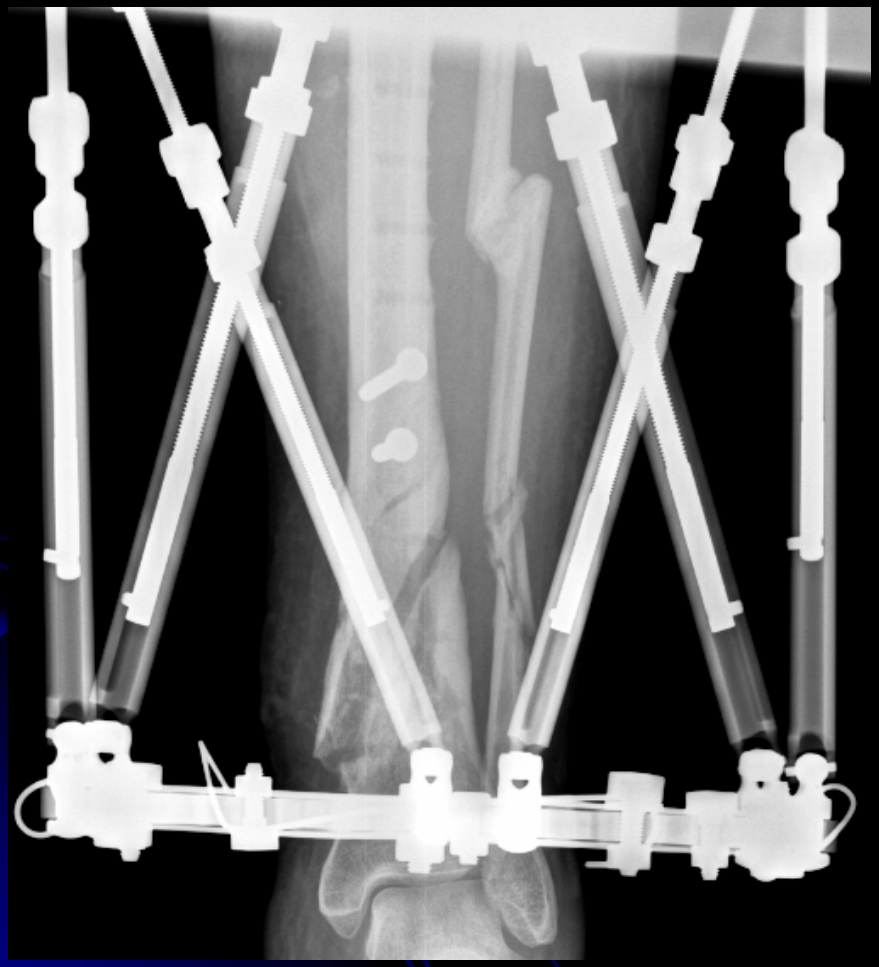
# 6 months post op



# 24 months post op

# Referred Few days post-op

# Day 1



# 18 months postop

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# Questions