THE USE OF AN ILIZAROV FRAME FOR FAILED NON-OPERATIVE TREATMENT OF CHARCOT FOOT DISEASE

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‘THE USE OF AN ILIZAROV FRAME FOR FAILED NON-OPERATIVE TREATMENT OF CHARCOT FOOT DISEASE’

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‘My disclosure is in the Final AOFAS Mobile App. I have no conflicts with this presentation’
THE PROBLEM
THE SOLUTION?
NATURAL HISTORY

Acute

- ‘Pre-collapse’, phase (first 2-3 weeks)
  - Swollen
  - Bone morphology normal
  - Raised skin temperature of leg and foot (>3 degrees compared to opposite side)
- ‘Collapse’, phase (3 weeks - 6 months)
  - Bone collapse and joint destruction
  - Raised skin temperature

Chronic

- Bone healing with / without deformity
- Normal skin temperature
OUR EXPERIENCE

• Acute Charcot patients between 2010-2015
• 44 Patients
  • Mean Age 59 yrs
  • Follow up over 5 years
OUR INDICATIONS FOR FRAME

1. Acute Charcot
   Failure to hold position in contact cast

2. Acute Charcot
   Recurrent ulceration in contact cast

3. Chronic Setting (foot deformity post Charcot)
   Patients with recurrent pressure ulcers and associated deformity
   Use frame following corrective surgery to prevent further Charcot ‘flare-up’
BEFORE
APPLICATION OF FRAME
AFTER
RESULTS

• Ilizarov frame used in:
  • Acute phase – 5 patients
  • Chronic phase – 4 patients
• No amputations or osteomyelitis
• All patients treated surgically were able to wear regular or simply modified shoes on discharge.
CONCLUSIONS

• Mainstay in treatment is total contact casting
• Recognising the ‘pre-collapse’ phase of acute Charcot is CRUCIAL
• Monitor patients when in contact cast (for ulceration and change in position)
• There is a role of Ilizarov to:
  • Prevent bone deformity
  • Temporary device to neutralise foot (in presence of fusion / osteotomy)