Total Ankle Replacement Following Septic and Rheumatoid Osteoarthritis: A Patient-Based Comparison of Outcome

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My disclosure is in the Final AOFAS Program Book.

I have a potential conflict with this presentation due to:
Financial/material support from Integra
What are the Problems?

Risk of re-infection

- Remaining bacterial load
- Implants
  → Re-activation of infection

That could mean:
Total ankle replacement too dangerous
Study Purpose

- to evaluate the functional outcome of TAR in secondary septic ankle osteoarthritis
- to assess the risk of re-infection after TAR
- to compare the outcomes with those obtained in patients with TAR after rheumatoid osteoarthritis
Patients

TAR after septic osteoarthritis

- 18 primary TARs in 18 patients
- Gender: female 10, male 8
- Age: 44.1 years (range: 19.8 to 62.9)
- Etiology: Staphylococcus aureus 12, Staphylococcus epidermidis 3, Enterococcus faecalis 2, Streptococcus 1
- Mean time after infection: 4.8 years (range: 0.4 to 24.3)
Patients

All 18 patients could be matched to 36 suitable patients undergoing TAR due to rheumatoid OA during the same general time frame

→ Age, gender

→ Height, weight, BMI

→ ASA classification
Results

Pain relief → VAS

- Septic OA:
  6.6 → 2.8 (P < 0.001)
- Rheumatoid OA:
  7.1 → 1.7 (P < 0.001)
- No statistically significant difference septic vs. rheumatoid OA
Results

Functional outcome → Range of motion

• Septic OA:
  25.6° → 33.6° (P = 0.007)

• Rheumatoid OA:
  28.2° → 34.5° (P < 0.001)

• No statistically significant difference septic vs. rheumatoid OA
Results

Functional outcome → AOFAS hindfoot score

• Septic OA:
  42.3 → 75.2 (P < 0.001)

• Rheumatoid OA:
  38.1 → 74.8 (P < 0.001)

• No statistically significant difference septic vs. rheumatoid OA
Conclusions

- TAR after septic OA
  → comparable results in patients with TAR after rheumatoid OA
- No higher risks
  → infection
  → healing of soft tissues
- TAR is a viable treatment in patients after septic OA