Amputation or Limb Salvage for Severe/Complex Ankle or Mid-/Hindfoot Injuries: Getting the Best Outcomes

For severe lower-limb injuries, selecting the best treatment between limb salvage and amputation remains a clinical challenge.

Amputation may produce better outcomes than limb salvage for some injuries.

How different would primary outcomes be with amputation for patients who underwent limb salvage?

Prospective observational study compared outcomes of patients with limb salvage vs. their outcomes had they undergone amputation:

Patients who underwent limb salvage (N = 488, 18-60 years) at 18 months

- Combat injuries (n = 7)
- Civilian injuries (n = 481)

Primary outcome measured: Short Musculoskeletal Function Assessment (SMFA)

Causal analysis estimates based on outcomes of similar patients with amputation

Types of injury treated with limb salvage

- Type-III pilon/IIIB/C ankle fracture
- Type-III talar/calcaneal fracture
- Open or closed blast/crush foot

Causal analysis showed...

- SMFA mobility score would have improved by 7 points if the patients had undergone amputation

Improvements were largest for...

- Pilon/ankle fractures
- Complex injury patterns

Amputation should be considered as a treatment option rather than a last resort for the most complex terminal lower-limb injuries.