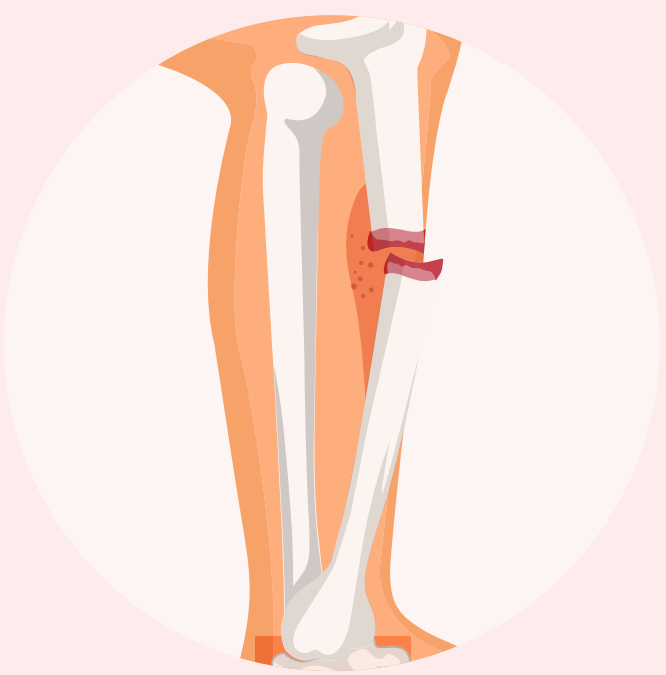


Comparative Efficacy of Intramedullary Nailing and External Fixation for Open Tibial Fractures

In low- to middle-income countries, there is a lack of consensus on the most suitable treatment option between intramedullary nailing (IMN) and external fixation (EF) for the long-term management of open tibial fractures



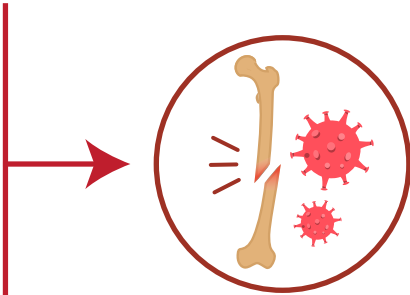
Randomized clinical trial to assess outcomes in patients from Tanzania with open tibial shaft fractures

N = 240

EF treatment group

IMN treatment group

Postoperative follow-up at 3 to 5 years to determine



Primary outcome

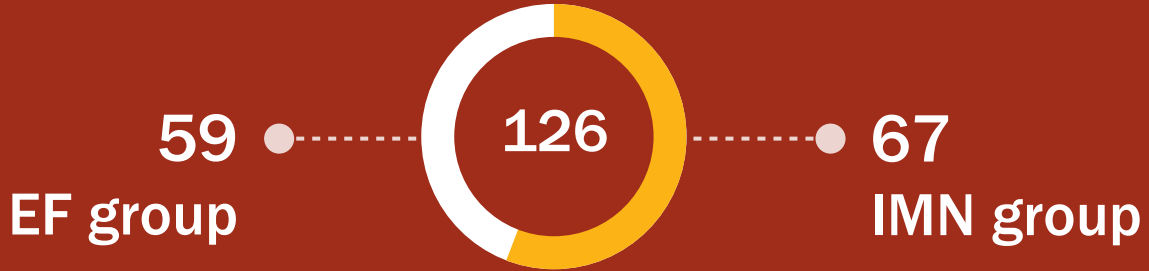
Death or reoperation for fracture-related complications



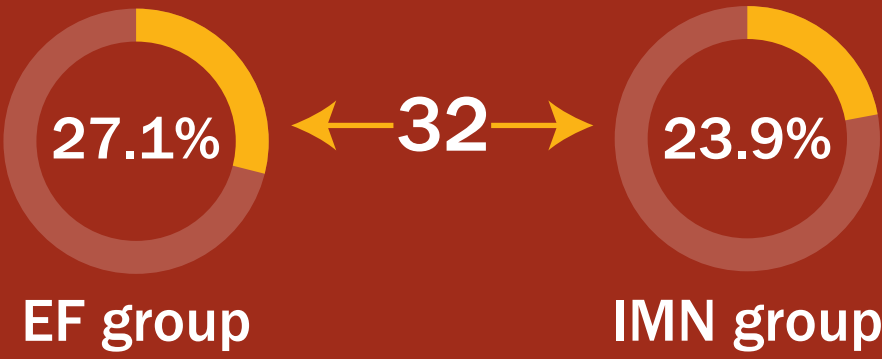
Secondary outcomes

- Quality of life (EQ-5D-3L index score)
- Function (FIX-IT score)
- Radiographic alignment (mRUST score)

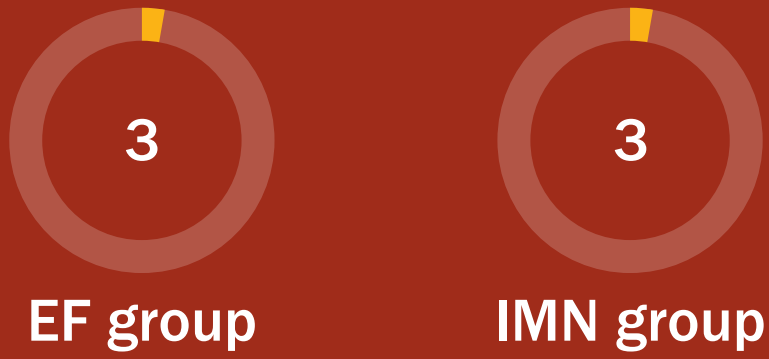
Patients who died or returned for a follow-up after a mean duration of 4 years



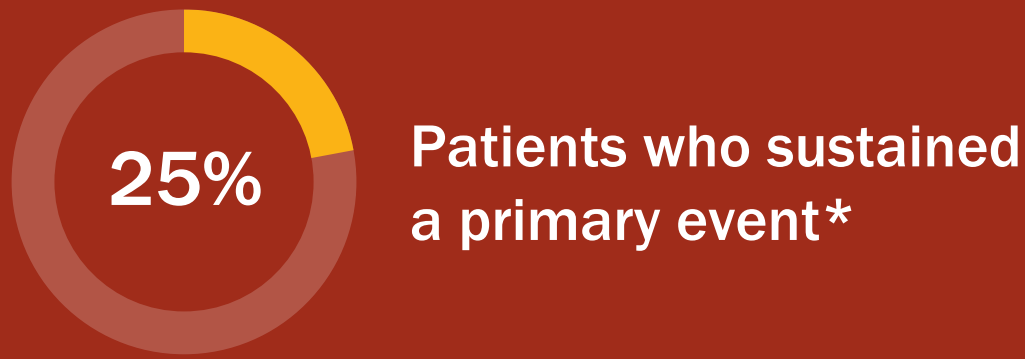
Number of composite primary events detected



Events newly detected on extended follow-up



Unresolved chronic fracture-related infections or nonunion detected in



*Primary event: A composite of death or recommended reoperation for the treatment of deep infection, nonunion, or malalignment

IMN and EF groups had similar



EQ-5D-3L scores



FIX-IT scores



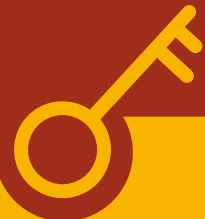
mRUST scores



Significantly lower EQ-5D-3L scores in patients with primary events without resolution, as compared to patients with resolved or no complications



EQ-5D-3L scores took at least a year to normalize in patients with resolved or no complications



Regardless of treatment choice, a quarter of patients experienced fracture-related complications, 25% of which persisted to affect long-term outcomes of open tibial fractures

Outcomes of Intramedullary Nailing and External Fixation of Open Tibial Fractures

Cortez et al. (2022) | DOI: 10.2106/JBJS.22.00016

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