

8th International Symposium on the Diabetic Foot

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World Forum - The Hague - The Netherlands

Minimally Invasive Surgery

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**Association
of Diabetic
Foot Surgeons**

Conflict of Interest

- Orthofix
- BoneSupport

What is minimally invasive (Charcot) foot surgery?

- Minimal incisions?
- Minimal bone injury?
- Minimal internal hardware?
- Use of specific tools?

Primum non nocere

Problem

- Moderate deformity with bony prominence
- Severe deformity or instability
- Impaired soft tissue
- Poor bone quality

Solution

- Exostectomy
- Deformity correction
- Small skin incision
- No bulky implants

1

MIS plantar exostectomy



MIS plantar exostectomy



A tool



MIS plantar exostectomy



MIS plantar exostectomy



2

MIS fracture gap debridement + ex fix



MIS fracture gap debridement + ex fix



Box typ external fixation (clamp to bar)

MIS fracture gap debridement + ex fix



2 and 16 months postoperative

3

Displaced ankle fracture



Open reposition, tibial osteotomy, Steinman pins



Follow-up treatment with cast



Final outcome



4

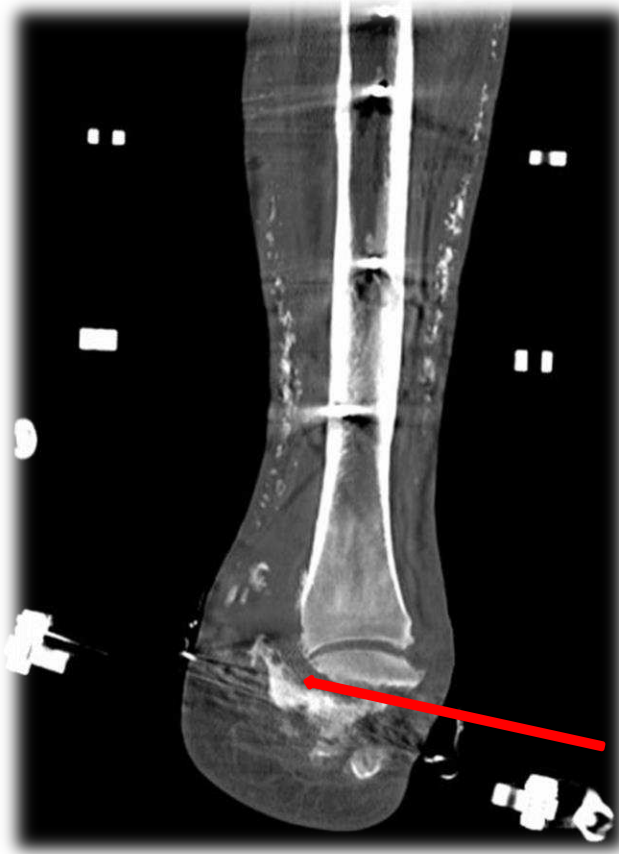
6-axis Platform / Flight Simulator



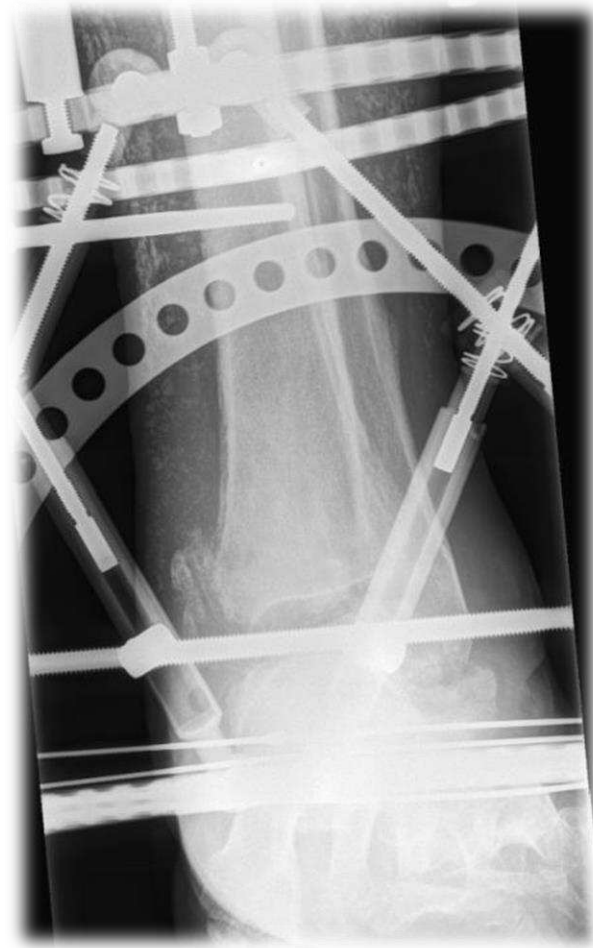
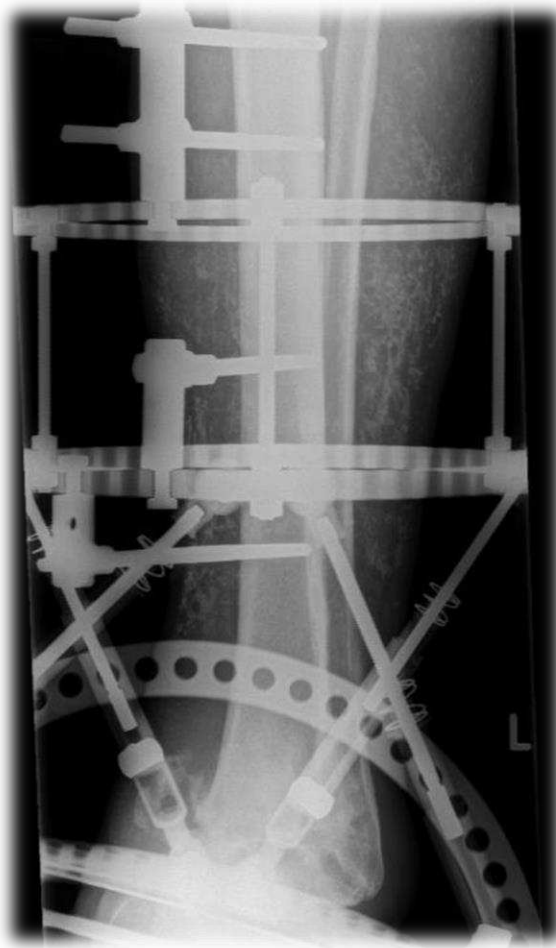
Gradual deformity correction



Gradual deformity correction



Gradual deformity correction



Gradual deformity correction

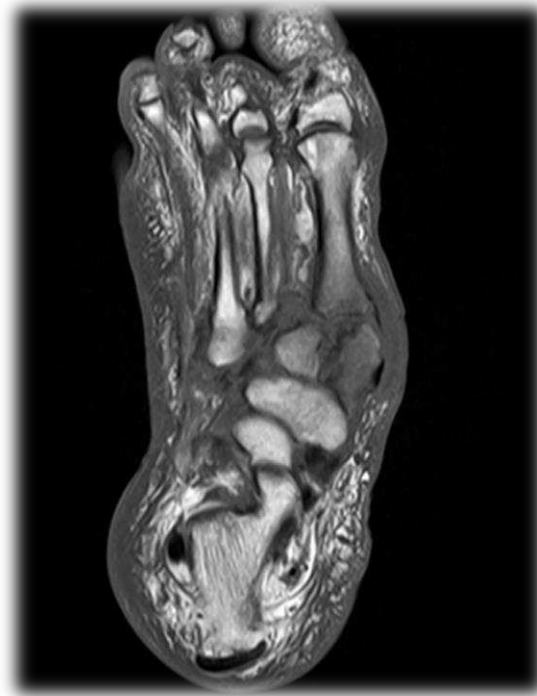


5

Distraction + MIS reduction



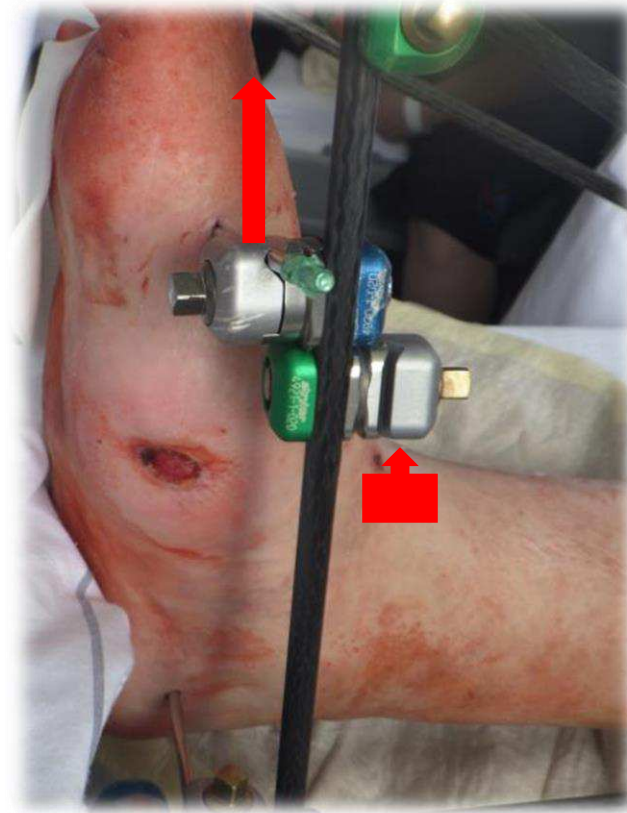
CN 2 with displaced Lisfranc luxation



CN 2 with displaced Lisfranc luxation



First stage: traction treatment



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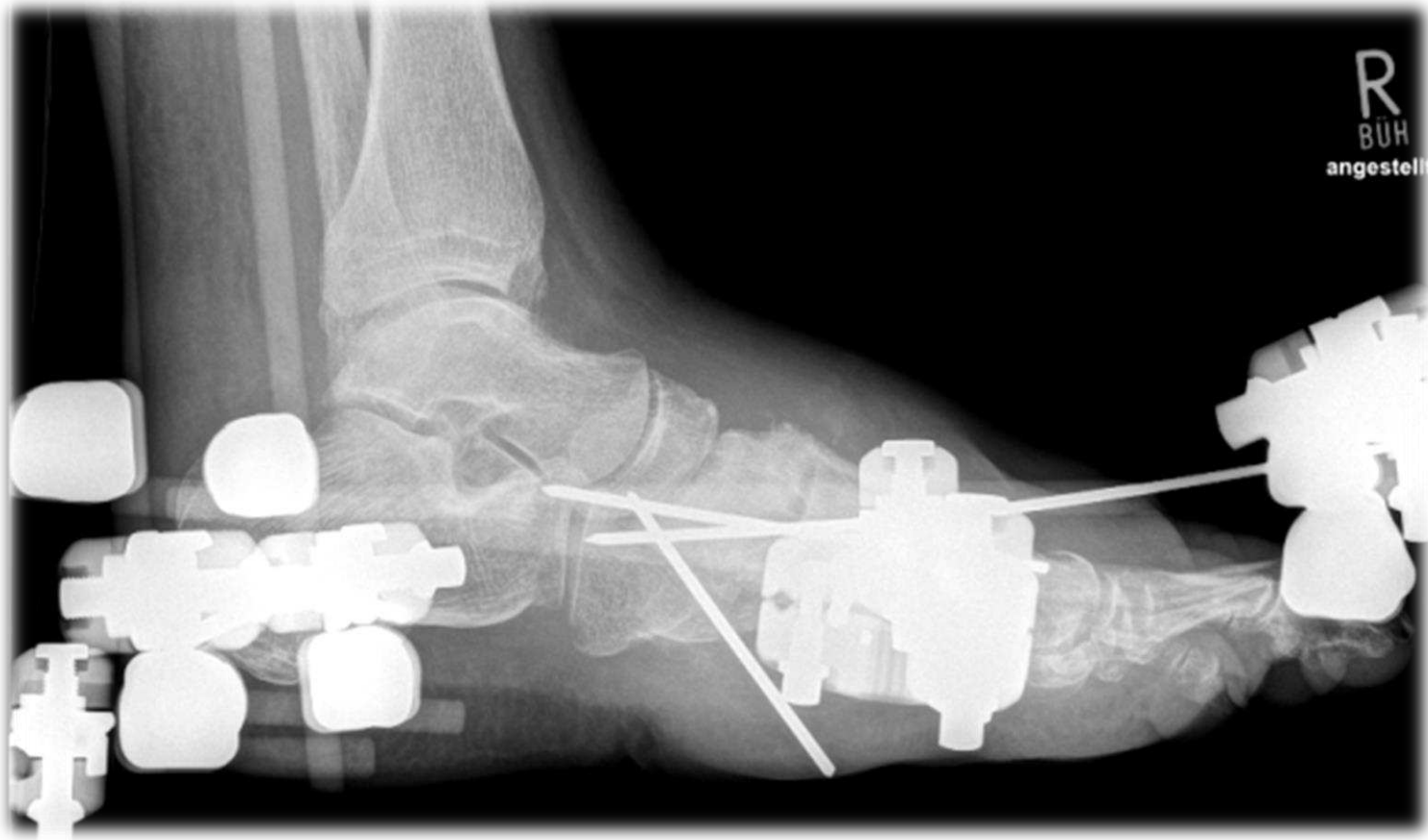
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Second stage: MIS Lisfranc fusion with ex fix



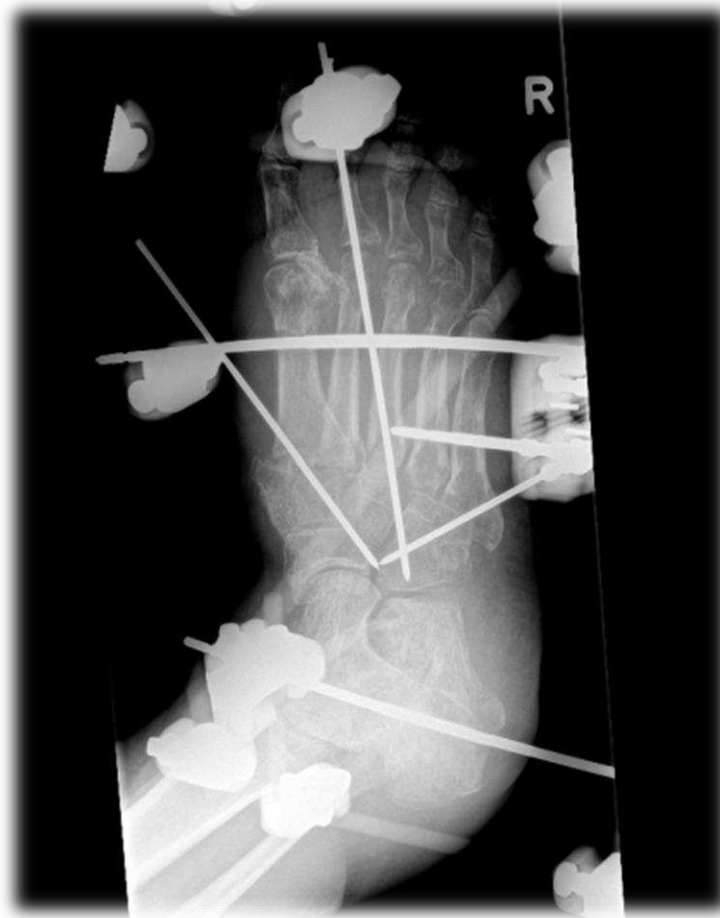
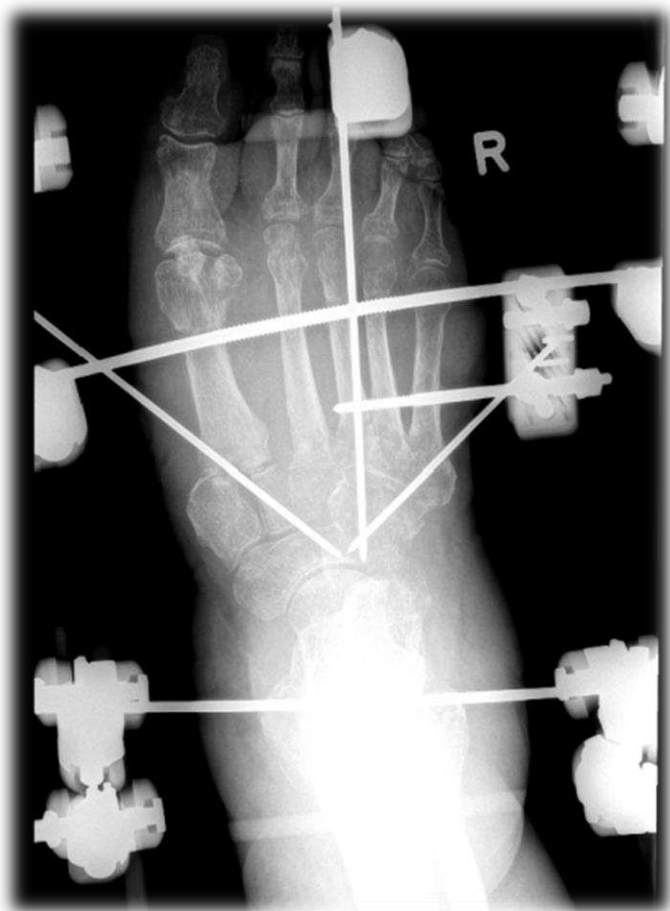
Second stage: MIS Lisfranc fusion with ex fix



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20181002



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In AFO



Final outcome



Final outcome



6

A failed case



Gradual correction, no joint preparation



After removal of the frame



Early recurrence



Final outcome



Take home messages

- Do only minimal harm to the foot
- Remove all metal implants
- Make the foot only as stiff as necessary
- Repair joints and preserve some ROM
- Do not forget basic principles of foot surgery

Thank you for your attention



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