

CASE 8

**SEPTIC
NON-UNION IN
DISTAL TIBIA**

Courtesy of BG Unfallklinik Duisburg,
Germany

DISTAL TIBIA (CASE 8)

- **Patient:** 72-year-old male, supramalleolar osteotomy was performed.
- **Preoperative status:** Fracture of the plate 5 months post-op after the injury. 7 months post-op there was swelling, pain and reddening. Diagnosis of tibial osteomyelitis (non-union) 8 months after the initial injury.
- **Bacterial culture:** *Staphylococcus epidermidis*

DISTAL TIBIA (CASE 8)

6 months after injury

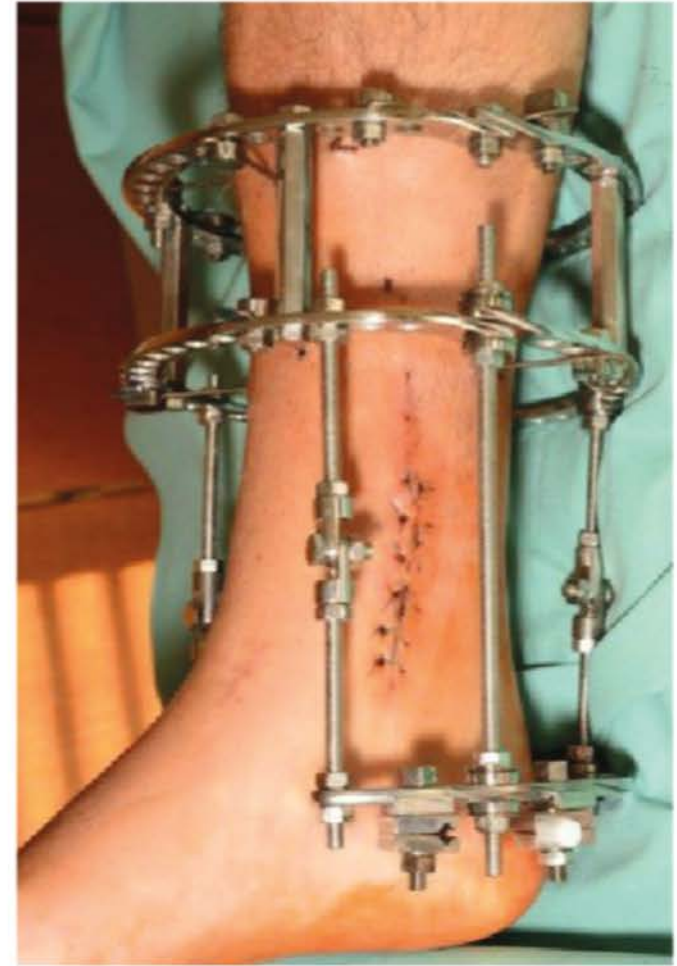


7 months after injury



DISTAL TIBIA (CASE 8)

Revision surgery 7 months after injury



DISTAL TIBIA (CASE 8)

- **Complication:** Persistence of infection and new bacteria encountered. Three further revisions with debridement performed.
- **Bacterial culture:** *Enterococcus faecalis* and *Staphylococcus caprae*

DISTAL TIBIA (CASE 8)

Revision surgery 9 months after injury



DISTAL TIBIA (CASE 8)

- **Operation:**

Revision surgery 10 months after injury and implantation of 20 cc bioactive glass.

Post-op after bioactive glass implantation

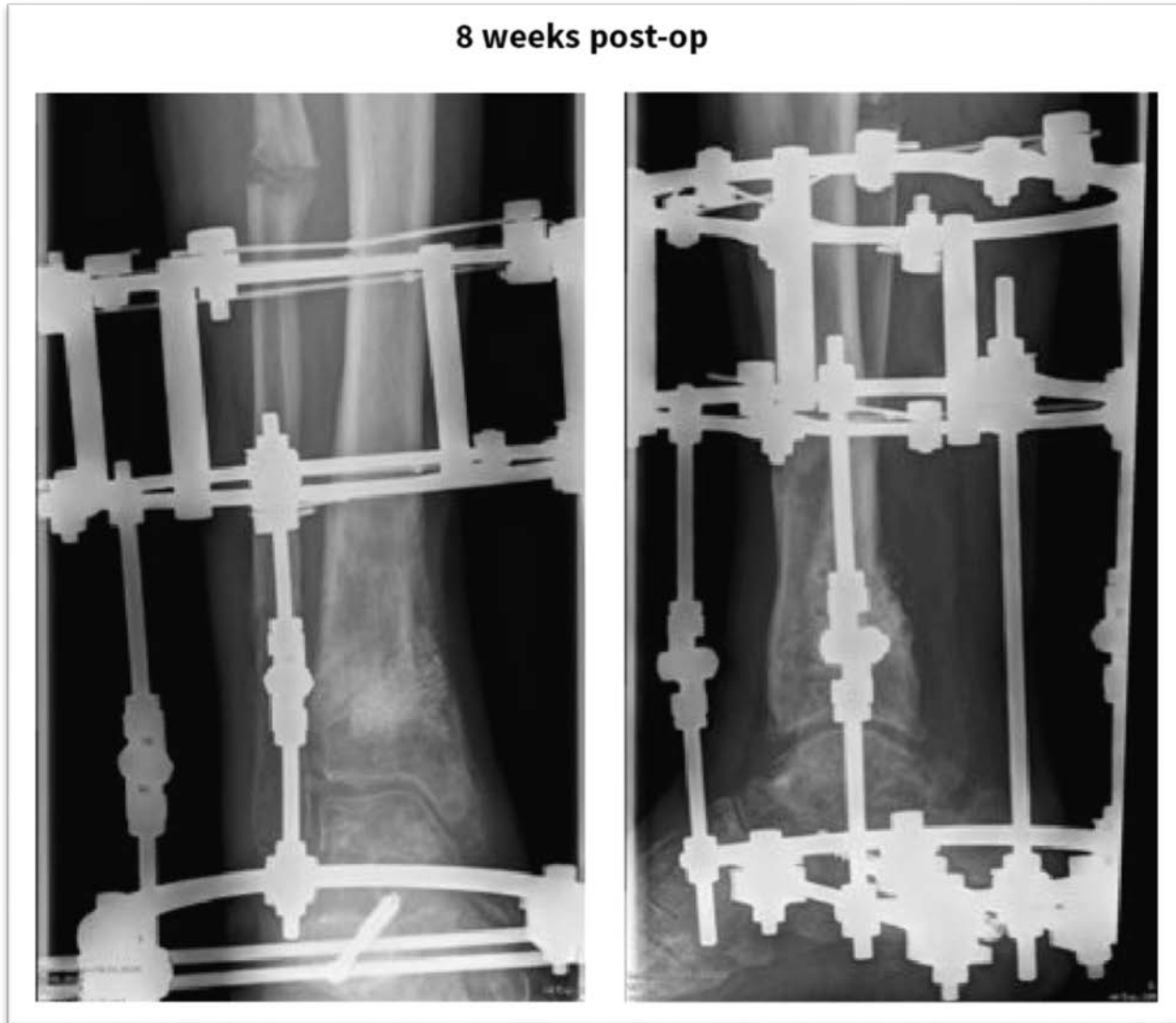


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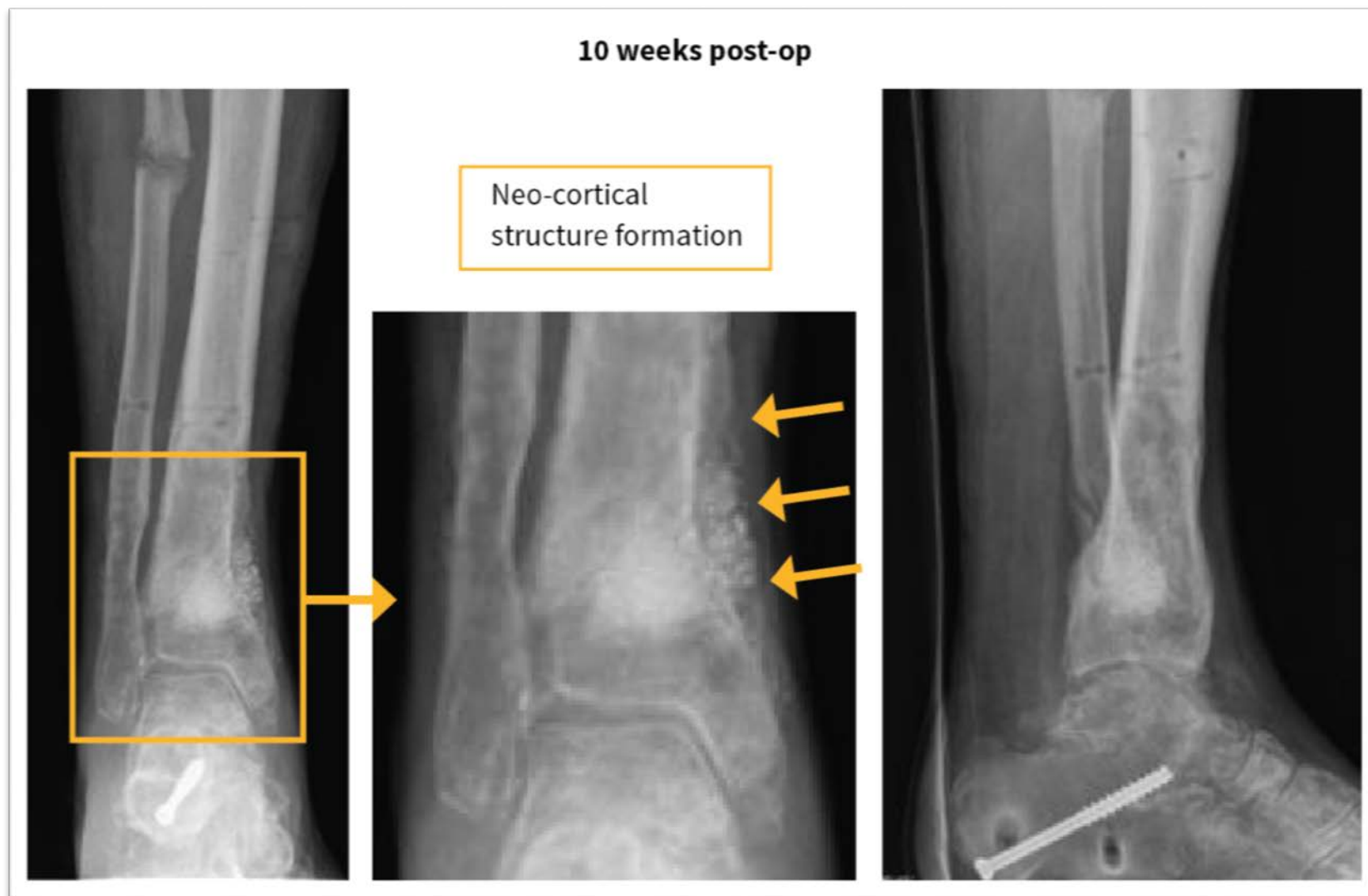
8 weeks post-op



DISTAL TIBIA (CASE 8)

- **Clinical observation:** Periosteal reaction resembling a “neo-cortical-structure” was visible 10 weeks after treatment.

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- **Final clinical outcome:** Complete integration of bioactive glass into the bone structure and full consolidation could be observed at 2 years post-op.

