CASE STUDY.

NEWCLIP-TECHNICS

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CALCANHEAL:
Bilateral calcaneal fractures treated with calcanheal plates: lateral extensile and sinus tarsi approaches

Physician profile.

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Patient history.

The patient is a young man (less than 30), a physical worker with normal weight and without comorbidity factor. He came at the hospital with a bilateral Calcaneal fracture (Sanders III on the right side and Sanders IV on the left side) after a fall from a ladder.

To evaluate the type of fracture, a CT Scan with coronal, sagittal, axial and 3D views was prescribed.

A conservative option was evaluated and rejected due to the subtalar joint involved and the patient age. An operative treatment was then chosen to restore the subtalar joint and the height of the Calcaneus.

For the right side (Sanders III), a MIS approach with a sinus tarsi plate seemed to be the best option, minimizing the peroneal tendons damage and reducing the risk of infection.

On the left side (Sanders IV), due to the complexity of the fracture, a L lateral extensile approach was chosen. A perfect condition of the skin is crucial to obtain a good result.

The surgery was scheduled around two weeks after the injury in order to have a healthy skin prior the surgery.

X-rays at 2 weeks

Surgical treatment.

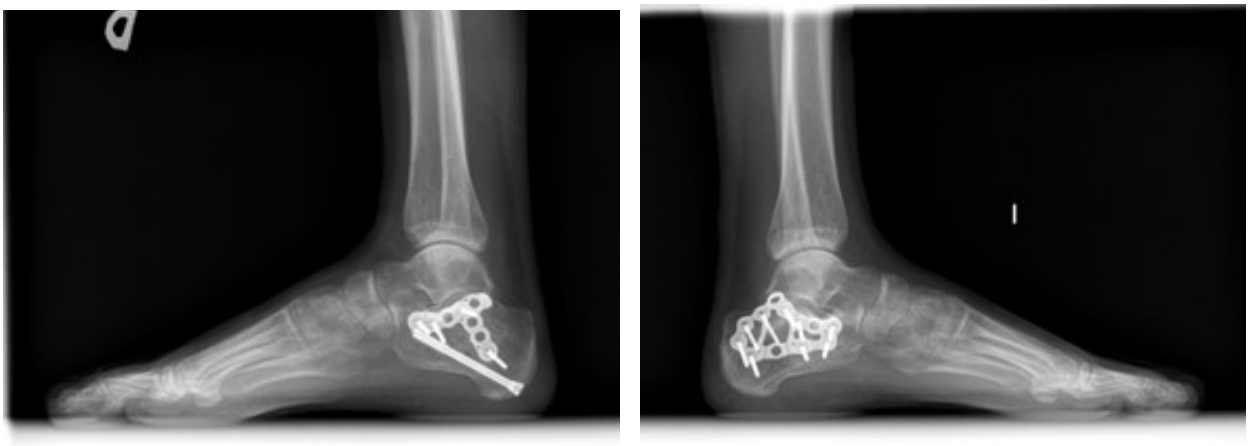
The patient is positioned in lateral decubitus under general anesthesia with a tourniquet at maximum of 300 mmHg.

The first step of the surgery is the management of the calcaneal tuberosity. A 6mm cannulated Footmotion Large Screws is often used to maintain the position of the tuberosity.

The peroneal tendons need to be separated properly.

The subtalar joint is carefully reduced and temporarily fixed with Kwire. After fluoroscopy checking and verification of the congruency of the subtalar joint, the plate can be positioned and the screws are inserted.

X-rays at 8 months



Post-operative follow-up.

A cast splint is prescribed for two weeks. Weight bearing is not allowed for 6 weeks but ankle movements are permitted at the second week. Stitches are removed after 3-4 weeks. The partial weight bearing can start the 6th week.

Physiotherapy can then be prescribed if needed.

X-rays control: Immediate – at 2 weeks – at 6 weeks and 10 weeks.

Patient feedback at 6 months:
The patient has a full range of mobility with minor pain during full weight bearing and dorsal flexion of the ankle. The patient is back to a normal activity 6 months after the surgery.

Physicians conclusion.

If the fracture typology allows it, Mini Invasive Surgery (MIS) approach through a sinus tarsi approach will always be preferred for calcaneus fracture to improve the lateral pain management. Newclip Technics offers an external guide to help the insertion of the plate under the skin and the insertion of the screws in the tuberosity.

If a Sinus tarsi approach is not an option, the Newclip Calcanheal range offers a wide range of plates for traditional extensile approach.

Manufacturer : Newclip Technics – Case Study EN – Calcanheal – ED1– 02/2023 - Medical device EC: class IIb – CE1639 SGS BE
Read labelling and instructions before the use of Newclip Technics medical devices.These products must be handled and/or implanted by trained and qualified staff who have read the instructions before use.