

PRESENTATION OF THE ARTHROSCOPICALLY ASSISTED TIBIO-TALAR-CALCANEUS ARTHRODESIS TECHNIQUE (TTC FUSION)

G.Anagnostou, N.Goutsiou, M.Kotsapas, P.Enfientzoglou, V. Tsakiri A.Eleftheropoulos



ORTHOPAEDIC DEPARTMENT OF G.H OF NAOUSA.

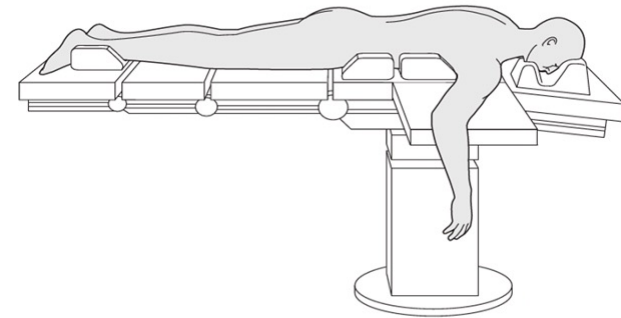
REFERENCE OF A SERIES OF 20 PATIENTS WHO UNDERWENT AN ARHTROSCOPICALLY ASSISTED TTC FUSION

- Period 2008-2022, 20 patients
15 female-5 male
- Indications:
 1. Post traumatic arthritis
 2. Malunited fractures
 3. Primary approach to ankle fractures.



POSITION OF THE PATIENT AND ROOM PREPARATION

- Prone position
- Leg slightly proud on the OR bed in order to allow 90 degree angle of the ankle
- Tourniquet is placed on the level of the thigh at 300mmhg pressure.

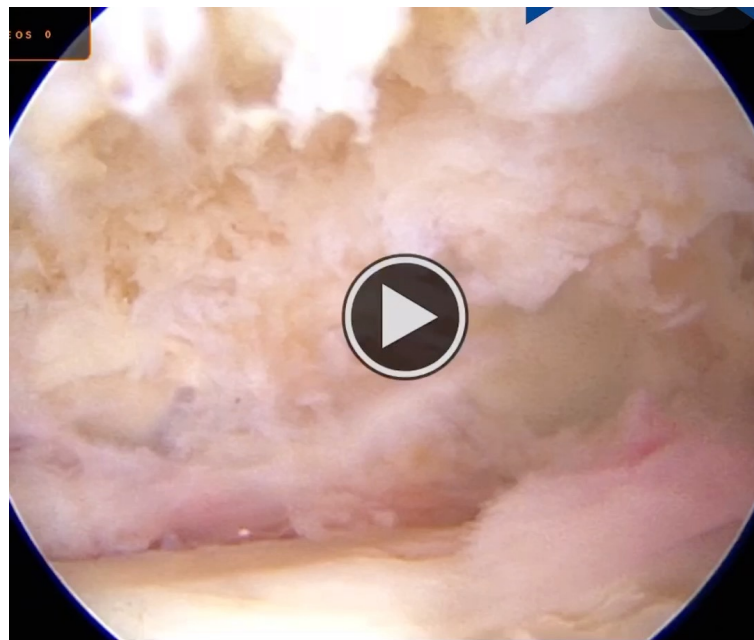


SURGICAL APPROACH

- 2 arthroscopic portals at the level of the lateral malleolus medially and laterally of the Achilles tendon (Niek van Dijk)



Debridement of the ankle cartilage using the arthroscope and an acromioniser



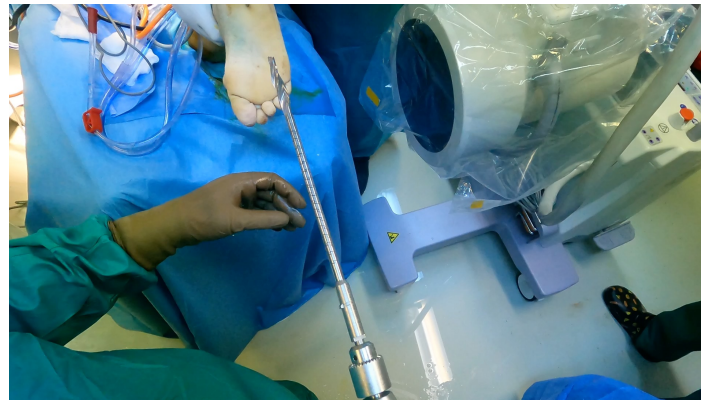
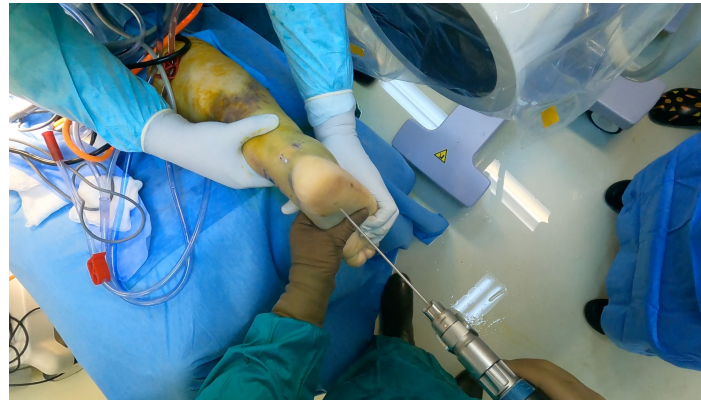
Ankle in 90 degrees flexion

Guidewire placed through the calcaneus, center of the talus and the middle of the tibia under radiology checking (c-arm).

Reaming of the route with gradually enlarged reamers. (5.5mm)

Placement of a reverse nail and stabilise it both proximally and distally with screws.(5.2mm)

Closure of the wounds and place a cast with the ankle in 90 degrees position for 6 weeks followed by an orthopaedic ankle boot.



Arthroscopic vs Open TTC fusion

- Less complications
- Smaller chance of infection
- Less post-op pain
- Less time of hospitalisation
- Faster rehabilitation
- Aesthetically better

Comparison of arthroscopic to open tibiototalcalcaneal arthrodesis in high-risk patients

Sebastian Felix Baumbach ¹, Felix Kurt Massen ², Severin Hörterer ³, Mareen Braunstein ⁴, Hazibullah Waizy ⁵, Wolfgang Böcker ⁶, Hans Polzer ⁷

Affiliations + expand

PMID: 30455093 DOI: 10.1016/j.fas.2018.10.006



RESULTS

- Patients postoperatively and through the periodic evaluations present with a satisfactory range of movement, minimum or no pain and sufficient healing.



CONCLUSIONS

The arthroscopically assisted tibio-talar-calcaneus arthrodesis (TTC FUSION) is a reliable alternative choice of treatment for chronic and acute traumas of the area.

