

Chopart amputation and prosthetic care on a diabetic foot

Peter Farkas M.D., Zsofia Naszvadi, Harrira Fahed M.D.

National Institute for Medical Rehabilitation, Budapest, Hungary



Trophic ulcer, osteomyelitis

- Partial foot amputation at the distal part of the foot (toe or metatarsal level) in dysvascular patients
- The most common problem: the trophic ulcer
- The inflammation and necrosis reach the bones and joints very often, causing severe bony destruction.
- OM, Charcot-foot, DOAP

- Localisation of the disorder and surgical treatment
 - One or more toe (resection of the toe)
 - MTP joint, metatarsal bone (toe and metatarsal resection)
 - Pressure source on the middle part of the longitudinal arch (resection of the bony bump, exostosis)
 - Under the heel bone (resection of the calcaneus)



Partial foot amputation

- The level of the amputation is determined by blood circulation and partly biomechanical reasons
- Non-operative treatment, if no OM or serious infection (total rest, wound care, antibiotics, plaster cast, orthoses, diabetic shoes)
- Surgical treatment necessary if non-operative procedures ineffective
- The aim (stump as long as possible, on distal level)



Chopart amputation

- Chopart amputation
 - Metatarsal bones and tarsal bones are affected severe destruction and osteomyelitis
 - The talus és calcaneus bone are intact
 - Clinical state
 - Good arterial circulation
 - Condition of the bones and soft tissues
 - Equinus position of the foot (muscle disbalance)
 - Mostly traumatic cases, and rare in dysvascular cases
- Tarsal amputation is rarely performed in diabetic neuropathy!



Chopart amputation – a case report

- male born in 1949
- DM2T 1982
- II.-III.-V. toe resection
- Infection of the foot, necrosis
of the soft tissues,
fever, septic condition
- Clinical state
 - Abscess, instability,
crepitation, hypaesthesia,
good blood circulation



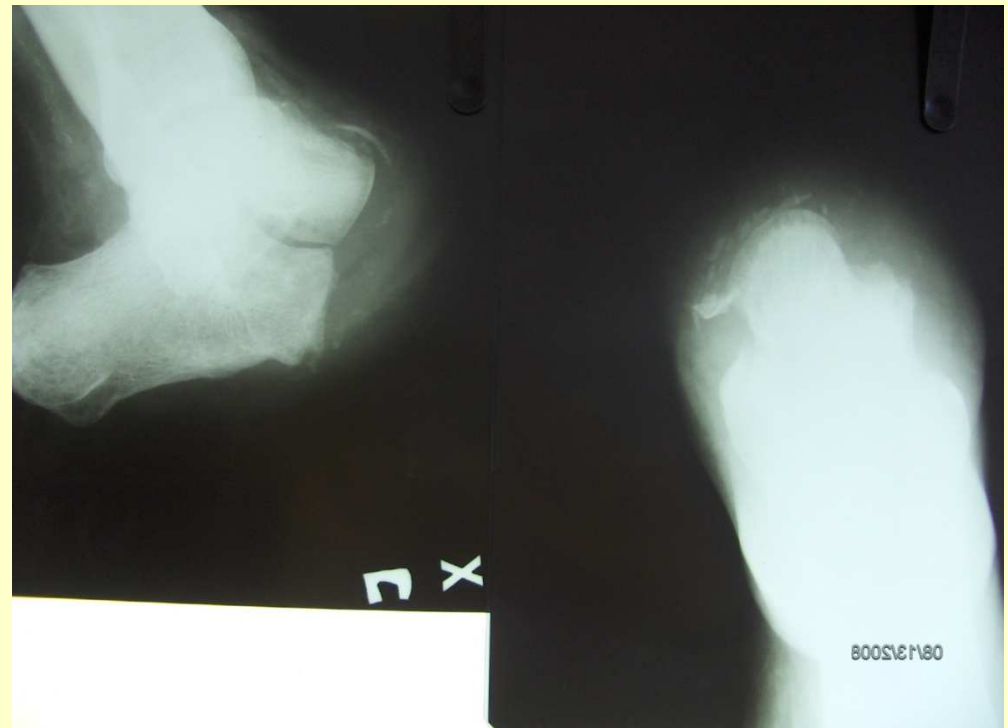
Chopart amputation – a case report

■ Radiological signs

- The toes, the metatarsal bones and tarsal bones were affected severe destruction and osteomyelitis , but the talus and calcaneus was intact
- Chopart amputation was performed, because soft tissue conditions were so good



Chopart amputation



Prosthetic care

- The postoperative protocol was similar to the toe or metatarsal amputation
- Mobilisation with wheelchair
- Walking exercises
- MRSA wound infection
- Soft dressing of the stump
- Temporary orthotic care (AFO)
- Prosthetic care
 - Laminated prostheses
 - Silicone



Prosthetic care

- The prosthetic care: not so easy
- Fixation of the prosthesis on the stump use to be the main problem
- The prosthesis rotates around the stump if there is no total contact suspension
- Patient used this silicone prosthesis without any problem with total weight

Silicone prostheses



Silicone prostheses



Summery

- Chopart amputation is rare in dysvascular cases
- Blood circulation, bone destruction, soft tissue necrosis, general condition of the patient
- Talus and calcaneus are intact with good soft tissue condition
- Weight bearing stump
- Laminated prostheses cause wounds on the stump very often
- Silicone prostheses is aesthetic, good fitting, light weight, custom made
- Stable and comfortable suspension
- Perspiration of the skin
- Distinctive support by the National Social Security



Thank you very much!

