

Limb salvage with hybrid external/internal fixator in Charcot extreme deformities: ten-years follow-up.

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Charcot neuroarthropathy is a condition inducing severe foot deformities and leading up to 80% major amputations if not correctly treated. Particularly the Sanders and Frykberg classification's patterns 4th, 5th and ulcerated 3rd one, have to be considered strongly hazardous for limb amputations. It is also known that Charcot neuroarthropathy is a condition strongly associated with cardiovascular induced death.

Since 2003 to date our group performed 80 limb salvages attempts in such patients (pts), using reconstructing methods consisting of ankle or midfoot arthrodesys with hybrid external/internal monoaxial fixator (Ortofix). **Aim** of the present study was to evaluate 10-years follow-up results of these procedures and 10-years history of the treated patients. We evaluated all single subject's recorded files from the intervention day and we considered as main events major amputations, minor amputations, lesion's relapse, death for any causes. **Results:** 73 pts were followed for a mean period of 84 (11-120) months. We excluded from our observations 7 pts which underwent to treatment in last six months, being still wearing fixator. We considered a successful arthrodesys both the complete arthrodesys per sé and any fibrosis allowing foot stability. 6/73 (8,2%) pts underwent to major amputations, caused by instable foot due to unsuccessful arthrodesys. 34/73 (46,6%) pts presented relapsing lesions on treated foot, and 14/34 (41,2%; 19,2% considering the whole 73 pts) underwent minor amputations, such as finger or ray or transmetatarsal or Lisfranc or Chopart amputations. All of them are still weight-bearing on their foot after minor amputations. During the 10-years follow-up 12/73 (16.4%) pts died, 10 due to cardiovascular diseases (6 MI, 3 Ictus, 1 heart failure), 1 due to liver and 1 to renal failure. **Conclusions:** ankle or midfoot arthrodesys with hybrid external/internal monoaxial fixator (Ortofix) seems to be a good tool to reach limb salvage in patients with extreme deformities due to 5th, 4th and ulcerated 3rd one Sanders-Frykberg's patterns Charcot neuroarthropathy. Our data on the other hand confirmed the high cardiovascular death risk related to Charcot neuroarthropathy.