

[P04] SURGICAL MANAGEMENT OF CHARCOT DEFORMITY - INTERNAL OR EXTERNAL FIXATION?

Kiriakos Daniilidis¹, Daiwei Yao², Christina Stukenborg-Colsman², Christian Plaass², Leif Claaßen², Sarah Ettinger²

¹*Sporthopaedicum Straubing, Straubing, Germany*

²*Department for Foot and Ankle -University Hospital Hanover, Medical School, Germany*

Aim: Charcot neuropathy (CN) is a severe joint disease that makes surgical planning very challenging, because it is combined with ankle instability, serious deformities, and recurrent ulceration. The aim of the present study was to examine the rate of bone fusion after external or internal fixation in patients with CN.

Method: We retrospectively examined 58 patients with CN who had undergone reconstruction of the ankle either with tibiototalcalcaneal or tibiocalcaneal arthrodesis. The mean age was 59.1 (range 26 to 81) years at surgery. Of the 58 patients, 38 were treated using intramedullary nail arthrodesis and 19 using an external fixator (1 patient received neither).

Results/Discussion: At a mean follow-up period of 31.3 (range 12 to 57) months, limb salvage and bone fusion had been achieved in 94.83%. The mean time to bone fusion was 12 (range 6 to 18) months. Three patients (5.2%) required a more proximal amputation. All but these 3 patients gained independent mobilization in custom feet orthoses or off the shelf orthoses. Of the 58 patients in the present cohort, 56 (96.6%) would undergo surgery again.

Conclusion: In conclusion, internal and external fixation both lead to promising results in the treatment of CN. Internal fixation should be preferred when no indications of ulcer or infection are present.