

Free Papers D

[O70] KNEE ARTHRODESIS AFTER PROSTHETIC JOINT INFECTION: ARE FUNCTIONAL OUTCOME AND COMPLICATION RATES COMPARABLE WITH ABOVE-THE-KNEE AMPUTATION?

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Aim: Prosthetic joint infections (PJI) after failed knee arthroplasty, especially in complicated courses with persisting or recurrent infections, may result in a considerable destruction of bone substance, the extensor apparatus and the surrounding soft tissue. In these cases reconstruction of a proper knee function may be impossible and the only solutions are: knee arthrodesis or above-the-knee amputation (AKA). However, both methods are associated with considerable functional deficits and high complication rates. The primary aim of the current study is to analyse the clinical course, outcome and complications in patients with knee arthrodesis and AKA after PJI and to compare these two methods in terms of the analysed parameters.

Method: Patients treated with a knee arthrodesis or AKA after PJI in an 11-years time period were included in this study. Demographic data, comorbidities, infecting characteristics and operative procedures were recorded. Patients were seen in regular intervals and underwent physical and radiographic examination. Major complications such as: re-infection, implant-failure, revision surgeries or stump healing disorders were recorded. Functional outcome with use of the Lower-Extremity-Functional-Score was assessed and the patients reported general health status (SF-12-questionnaire) was recorded.

Results: In total 87 patients with a knee arthrodesis and 32 patients with an AKA after PJI were included. Knee arthrodesis was performed in 81 patients with a modular system and in six cases with bone fusion. Re-arthrodesis had to be performed in 21 cases. Survival rate of knee arthrodesis was 86% after one year, 71% after five and 61% after ten years. Major complications such as recurrence of infection (n=16) implant loosening (n=12), implant failure (n=3) or per-implant fracture (n=5) occurred in 30% of the patients. In seven patients an amputation after failed arthrodesis had to be performed. In patients with AKA after PJI a similar complication rate of 34% (p=0.64) was seen. Recurrence of infection was diagnosed in nine patients and a re-amputation had to be performed in four cases. The final functional examination was assessed after a mean interval of 48 month and revealed comparably in both cohorts a comparable limitation of functionality (p=0.181) and a slightly worse physical quality of life after knee arthrodesis compared to patients with AKA (p=0.08).

Conclusions: Knee arthrodesis or above the knee amputation after PJI show similar functional limitations and comparably high complication rates. The patients have to be supervised by an interdisciplinary team to avoid complications and regain quality of life.