

SINGLE CENTER ANALYSIS ON 100 PATIENTS WITH DIABETIC FOOT ULCERS

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Introduction: There is agreement that diabetic foot infection represents a high risk for limb and life of diabetic patients. We investigated the course of healing in respect to wound infection and evaluated factors that might favour wound infection in diabetic patients.

Patients and methods: Patients were treated according to a standardized wound care protocol. In total, 100 patients were included in this study. Mean age was 65+10 years. Follow up was documented within a special wound documentation system. Wound infection was defined by clinical criteria. We distinguished primary wound infection at the first visit and postoperative wound infection.

The probability for healing or amputation was calculated by Kaplan Meier analysis and differences were calculated with the log rank test. Impact factors for the incidence of wound infection were calculated by the Chi-Quadrat-Test. Data is given as mean +SD.

Results: Mean time of follow up was 110+115 days and wound history 152+ 726 days. Sharp debridement was performed in 100%, bone resection in 19,4%, minor amputation in 12,3% and major amputation in 3,4%. There were 35% recurrent ulcers, 38,4% toe. 65,3% foot ulcers, in the 26,32% bone was exposed, in 33,8% pedal pulses were not palpable and mean ulcer size was 5,35+12,15 cm 3 (51%>1,2 cm 3).

Primary wound infection the probability for healing was not affected (p: 0.56). There was an increased probability for minor amputation (p: 0.0002) but not for major amputation (p: 0.44). Infection rate was increased for ulcers with bone involvement (p: 0.001), toe ulcers (p: 0.0003), ischemia (p: 0.0004) and large ulcers (p: 0.0009).

Postoperative wound infection the probability for healing was decreased (p: 0.0005). There was no difference in respect to minor (p: 0.21) or major amputation (p: 0.33). Infection rate was increased for toe ulcers (p: 0.006), large (p: 0.001), recurrent (p: 0.026) and multiple (p: 0.036) ulcers.

Conclusion: According to our data, the probability for major amputation was not increased by neither initial nor postoperative. The probability of healing was significantly affected exclusively by postoperative, but not initial wound infection. We concluded that initial and postoperative have a different impact factors on healing.