

Evaluation of the impact of chiropodist care in the secondary prevention of foot ulcerations in diabetic subjects over a period of 6 years in Austria

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Background: Diabetic foot ulcers after healing are associated with a high risk for recurrence of ulcers and amputations. We have recently demonstrated in a randomised controlled trial with duration of 1 year that chiropodist care can reduce recurrence rate of foot ulcers within one year. The aim of this follow up study was to investigate the impact of self paid chiropodist care in the original study population after 6 years. **Methods and Materials:** After healing of a diabetic foot ulcer, 91 patients were initially randomized to regular chiropodist care, which was free of charge or a control group for the period of one year. The whole study cohort was invited to participate in a follow up evaluation 5 years after end of the randomised control trial. In Austria chiropodist care is not reimbursed by the national health care system. Therefore we assessed in this evaluation the impact of self paid chiropodist care (at least 8 per year) on the recurrence rate of ulcers, amputation, and death in a high risk population. **Results:** 89 out of 91 patients (2 lost to follow up) could be analysed after 6 years. 40 underwent regular chiropodist care. 26 in the chiropodist care group vs. 38 patients in the control group developed a new ulcer within the six years [HR 0.60 (95%CI 0.36-0.97), $p < 0.04$] (Fig.), 4 vs. 10 amputations [HR 0.39 (95%CI 0.14 - 1.16), $p < 0.09$] were recorded, 11 vs. 21 patients died [HR 0.59 (95%CI 0.30-1.21), $p < 0.15$] in the chiropodist vs. the control group, respectively. Analyses for the aggregated endpoint (ulceration, amputation, death) showed a reduction in favour of the chiropodist care group vs. the control group (29 vs. 46 events [HR 0.54 (95%CI 0.33-0.83), $p < 0.01$]). **Conclusion:** Our follow up investigation confirms the high rate of adverse outcome in patients with a diabetic foot syndrome. More than every second patient developed a new ulcer or amputation within the six years of follow up. Furthermore, our data suggests that regular chiropodist care may reduce the recurrence of ulcers and amputations.