

The Follow-up Study of Diabetic Foot Patients Undergone Minor Amputations

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Background: The extent of primary surgical debridement is still remaining one of the basic questions in management of infected diabetic foot with forefoot involvement. Both the requirements of total removal of the necrotic tissues on the one hand, and of further suitable foot stump formation on the other hand require investigation of the outcomes of minor amputations in diabetic foot patients. **Purpose:** to study the follow-ups of minor amputations in diabetic foot patients. **Materials and methods:** The outcomes of minor amputations performed at our department in 2000-2005 in 39 diabetic patients with severe foot infections were analyzed. The follow-up period was 3-5 years. **Results:** Among these 39 patients 11 died. 6 patients initially have survived transmetatarsal foot amputations (TMA), another 6 patients have undergone partial forefoot resections (PFR, amputations of two and more toes) and 16 have had ray amputations. During follow-up period 13 patients have not developed any new lesions (9 having ray amputations, 3 having TMA and one patient having PFR). New ulcers developed on feet with postoperative deformities in 2 patients with ray amputations, in 1 after TMA and in 1 having PFR. New cases of foot infection in the operated foot appeared in 3 patients with partial resections and in 4 patients after ray amputations. The contralateral foot ulcers took place in 2 patients with foot stump after TMA, in one patient having partial resection and in one having ray amputation. **Conclusions:** Results of this study confirmed that minor amputations lead to new foot problems more than in half of patients in 1-5 years. We conclude that partial forefoot resections had no long-term advantages for operated foot in comparison with TMA. However the shortened foot due to TMA makes contralateral foot much more vulnerable to lesions. Thus, all kinds of minor amputations essentially disturb the basic function of limb. When choosing extent of primary surgery in infected foot, it is necessary to consider the possibility of the subsequent patient supervision and compliance.