

[P38] CONSERVATIVE APPROACH IS A GOOD OPTION IN DIABETIC FOOT SURGICAL TREATMENT?

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Diabetic patients with major amputation have a bad quality of life, prognosis and are expensive for health system. To avoid major amputations is the mission of diabetic foot treatment. Minor amputations (toe, ray, transmetatarsal, lisfranc, chopart) often help to obtain limb salvage, but few data are available about the best solution in partial foot amputation, risk of proximal amputation after foot surgery, outcome of patients.

Aim of the study: To evaluate foot and general outcome after minor or partial foot amputations in diabetic patients

Method: Interrogation of surgery database between January 2012 and December 2014, founded 1195 surgical treatment on diabetic foot. For this study, we excluded surgical procedures on acute drainage, calcaneotomy, skin and dermal graft, arthrodesis. We obtain 704 surgical procedures of minor and partial amputation of the foot. 99% of patients have type 2 diabetes, mean age was 72±11 years (mean ± SD), 82% were male, and a long history of diabetes 18 ± 11 years was founded. Peripheral neuropathy was present in 669 (95%) patients; peripheral arterial disease in 515 (73%), of them 416 (59%) underwent revascularization (94% endovascular, 6% surgical) before surgical intervention on foot.

Results/Discussion: We perform 359 surgical procedures at toe level (121 toe amputation, 237 partial toe amputation), 281 procedures at ray level (169 ray/rays amputation, 112 metatarsal bone resection), 65 minor amputations (53 transmetatarsal, 12 chopart). We compare characteristics of patients with different levels of treatment: non-statistical significant difference were founded in patient's age, diabetes duration, incidence of vascular disease and neuropathy, revascularization. Patients with forefoot amputation presented higher rate of ischaemic heart disease and dialysis (p<0.01). Outcome: of 359 patients treated at toe level 44 (12%) have ray amputation, 43 (12%) have forefoot amputation, 7 (2%) major amputation. Patients treated at metatarsal ray level: 18 (6%) have forefoot amputation, 2(1%) major amputation. Patients treated with forefoot amputation: 5 (8%) experienced major amputation. Mean follow up was of 22.1 ± 11.4 months. At follow up, 46 (12.8%) of patients treated at toe level died, 23 (8%) patients treated at ray level, 18 (28%) with forefoot amputation.

Conclusion: Data from this study indicate that conservative surgery of diabetic foot is a valid approach. Partial amputation of forefoot have a low percentage of proximal amputation. Forefoot amputation have higher rate of death at follow up respect more distal foot amputation, but they presented higher levels of comorbidity (terminal renal failure and ischaemic heart disease). In diabetic foot surgery, conservative approach lead to a lower risk of major amputation and permit a more functional autonomy.

Level of surgical treatment	n.	Basal characteristics		Outcome			
		Ischaemic heart disease	Dialysis	Ray amputation	Forefoot amputation	Major amputation	Death
Toe level	358	27 (7.5%)	32 (9%) p<0.01	44 (12%)	43 (12%)	7 (2%)	46(13%)
Ray level	281	22 (8%)	11 (4%)		18 (6%)	2 (1%)	23 (8%)
Forefoot amputation	65	12 (18%) p<0.01	17 (26%) p<0.01			5 (8%) p=0.01	18 (28%) p<0.01