

ISCHAEMIA AND INFECTION, LIMB SALVAGE CAN BE ACHIEVED IN A MULTIDISCIPLINARY SETTING

Piaggese Alberto¹

¹*Diabetic Foot Section of the University Hospital of Pisa (Pisa, Italy).*

As recent studies confirm, the prevalence of peripheral arterial disease, among acute diabetic foot (DF) patients, reaches 50% of the cases; almost half of them are CLI, characterized by the contemporary presence of deep ischaemia and foot lesion and/or pain, and by a very high incidence of lower extremity amputations (LEAs) and death.

Until some years ago the prognosis of DF patients with CLI was very poor, since the therapeutic possibilities were negatively affected by the difficulties in revascularizing such a severe pathology, and by the lack of an integrated therapeutic strategy.

In recent times, their prognosis did increase, with a significant reduction of both LEAs and mortality, thanks to the extensive use of percutaneous trans-luminal angioplasty (PTA), and to the promotion of a multidisciplinary approach, with aggressive surgical debridement, prompt antibiotic therapy and careful follow-up, with assisted wound closure.

Our experience, based on the application of the International Working Group on Diabetic Foot's (IWGDF) Guidelines, in a centre of referral for DF for Tuscany and central Italy, where a team of diabetologists, interventional radiologists and vascular surgeons works since many years sharing the responsibility of the cases, and where the local surgical management and follow-up is managed by the diabetologists, is extremely positive.

In a retrospective survey on 245 consecutive DF patients with CLI admitted in our Department, we found that PTA was performed in 189/245 (77%) patients, whereas medical treatment, surgical re-vascularization and primary amputation were performed in 44 (18.3%), 11 (4.3%) and 1 (0.4%) patients, respectively. PTA was successful in 184/189 (97.4%) patients with significant ($p<.0001$) increase in mean TcPO₂, particularly when infrapopliteal arteries were treated ($p=.001$).

All patients with DF lesions were surgically treated and followed up until complete healing. At a mean follow-up of 20 months, the overall clinical success rate was 60.4%; it was significantly ($p=.001$) higher after revascularization (75.9%) compared to medical treatment (48.3%). Mean time to ulcer healing was 23.2 weeks and it was significantly ($p<0.05$) affected by ulcer duration and TcPO₂ increase. Major amputation rate was 9.3%, being significantly ($p=.04$) lower after revascularization (5.2%) compared to medical therapy alone (13.8%). Cumulative mortality rate was 10.6%. Ulcer recurrence occurred in 11.6% of patients, requiring major amputation in 6.1% of cases.

In DF patients with CLI, the multidisciplinary approach with revascularization, surgical debridement, antibiotic therapy and structured follow-up is the treatment of choice, and

guarantees excellent outcomes.