Diabetic foot: Forefoot ulcer with osteomyelitis <u>J. Viadé</u> Diabetic Foot Unit. University Hospital Mútua of Terrassa(Barcelona) SPAIN

Introduction: Most infections that affect the diabetic foot involve the soft tissues; however, an inflammatory process of infectious origin accompanied by bone destruction (osteomyelitis) is also observed in 20% to 60% of cases. Objective: To study the effectiveness of outpatient surgical resection for forefoot ulcers in diabetic patients with osteomyelitis in whom conventional treatment was unsuccessful. Material and methods: We included 100 patients (mean age, 58.5 ± 19 years; mean time elapsed since onset of diabetes, 13.3 ± 7.3 years). Inclusion criteria: Diabetic patients with (a) neuropathy, defined as alterations on two or more tests (monofilament, pin-prick, Rydell tuning fork) and or ankle-arm index ≤ 0.7 , (b) an ulcer in the metatarsals, lateral foot, or toes, (c) positive bone probe test and/or X-ray or MRI compatible with osteitis, and (d) failure to respond to conventional treatment (antibiotics, topical wound care, and offloading). Treatment consisted of curettage with resection of necrotic tissue and extraction of bone fragments under local anesthesia on an outpatient basis. Tissues were closed with Vicryl® sutures and a drain was left in place. Patients also received topical wound care and culture-directed antibiotics for 6 to 8 weeks. We considered treatment successful when patients healed within 6 weeks. Results: Mean time to healing with conventional treatment before surgical treatment was 15.46 ± 11.4 weeks; after surgical treatment it was 3.8 ± 2.5 weeks. In one patient, no cure was achieved after 25 weeks' treatment; another patient developed bacteremia and took 13 weeks to heal. None of the patients required amputation. The ulcer closed in 2 to 4 weeks in 98% of patients. Conclusions: This technique is easy, economical, and very efficacious. Early surgical management shortens healing time (mean 15.4 to 3.8 weeks). Surgical management eliminates excessive pressure and avoids relapse; offloading is unnecessary in some cases.