Moderate/severe foot infections in diabetic patients with distal palpable pulses. Ten years experience in a single center

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Aim: The purpose of this study is to analyse our experience in the treatment of moderate and severe foot infections in patients with well vascularized foot. Although ischemia may be present in near 50% of patients with foot infections, it is interesting to know the outcome of surgical treatment of limb threatening infections and the rate of limb salvage in patients without lower limb ischemia. Methods: Retrospective analysis of the data set of the Diabetic Foot Unit of La Paloma Hospital from 01/January/1998 to 01/January/2008. Only patients whom one or both of the two distal pulses were palpable were included in this study. The infection criteria were based on clinical examination. Moderate and severe foot infections were reassigned according IDSA criteria (IDSA guidelines, 2004) since from the beginning of our activity at 1997 another classification had been used. According the old classification, all cases were classified as "limb-threatening infections". All patients were operated on within the first twelve hours after their admission to surgery department. Debridement was defined as if the infected tissue, whatever its size, was removed without amputating any part of the foot; as minor amputations if they involve a partial amputation of the foot that does not involve the ankle joint, and as major amputations if located above the ankle joint. Multivariate analysis to identify independent predictors of limb loss was performed using a stepwise logistic regression analysis. Results: During this period we have treated 146 patients with moderate or severe foot infections in patients without limb ischaemia. 117 patients suffered for moderate and 29 for severe foot infections. 82 patients (56.2%) underwent debridement, 57 (39%) underwent minor amputations, and 7 (4.8%) underwent a major amputation (5 below-the-knee and 2 abovethe-knee). There were 2 deaths in the series (1.3%). Predictive variables related to limb loss were fasciitis (OR 27.5, 95% CI 1.7-442.4) and myonecrosis (OR 55, 95% CI 4.9-610.9). Osteomyelitis, MRSA infection and IDSA moderate versus severe grade do not increase the relative risk of limb loss. Discussion: From our experience where treatment is based on early and aggressive surgical treatment, moderate/severe diabetic foot infections had been associated to a low rate of limb loss and mortality. Risk of limb loss was increased when fascia and/or muscle were involved by a necrotizing process.