Necrotizing Soft Tissue Diabetic Foot Infections. Our Experience in 116 consecutive patients. Aragón Sánchez FJ*, Quintana Marrero Y*, Hernández Herrero MJ*, Lázaro Martínez JL**, García Morales E**. *Diabetic Foot Unit. La Paloma Hospital. Las Palmas de Gran Canaria. Spain. ** Diabetic Foot Unit. Complutense University Podiatric Clinic. Madrid. Spain

Objective: To analyse the results of the treatment of necrotizing soft tissue diabetic foot infections (NSTDFI) and to establish whether the different types into which we have classified these infections, as well as other variables, are in any way significant for prognosis. Research **Design and Methods:** Retrospective analysis of a consecutive series of a sample of 116 patients suffering from NSTDFI who are the object of this study excluding patients treated for dry necrosis or secondarily infected. We have classified NSTIs of the diabetic's foot as necrotizing cellulitis if they affect subcutaneous cellular tissue and the skin (superficial NSTDFIs), as necrotizing fasciitis if they affect the deep fascia and the tissues located above and as myonecrosis in those cases where muscular necrosis is present (deep NSTDFIs). Results: 92 patients (79,3%) suffered from necrotizing cellulitis, 18 (15,5%) from necrotizing fasciitis and 6 (5,1%) from myonecrosis. In the necrotizing cellulitis group 6 major amputations were performed (6.5%) and there was a mortality rate of 2.1% (2 patients). In the necrotizing fasciitis group 9 major amputations were undertaken (50%), with a mortality rate of 22.2 % (4 patients). In the case of the myonecrosis group, the major amputation rate was 83%, and the mortality rate was 16.6%. Staphylococcus aureus was the most frequently isolated (n=41, 36.28% of isolated germs). 20 of the Staphylococci aureus isolated (48.7%) were methicillin-resistant. There is a relation between major amputation and the existence of fasciitis and myonecrosis, with odds ratios of 19.3 and 58, respectively. The mortality rate among patients was related to a higher age (OR= 1.1461) and the existence of a deep necrotizing soft tissue infection (OR=20.0798). Conclusions: NSTDFIs require early surgical treatment. Treatment should initially involve agressive debridement, which will allow the surgeon to establish the layers affected by the necrotizing process and not opt for major amputation based on the external appearance of the foot -except for when the state of the patient requires such treatment to save his or her life. The division into superficial infections or necrotizing cellulitis and deep infections, including necrotizing fasciitis and myonecrosis, has prognostic value as regards the risk of major amputation or death, and that is why we believe that these factors should be included in any classification related to diabetic foot infections.