

**Factors contributing to clinical outcomes in infected foot: a preliminary analysis from the Portuguese Registry of Infected Diabetic Foot Ulcer**

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**Objectives:** To characterize patients with moderate to severe infected foot ulcers and to identify the main factors contributing to clinical outcome. **Methods:** An observational study using data from the National Registry of Infected Diabetic Foot Ulcer - Portuguese Society of Diabetes that currently covers 8 public hospitals. The cohort included adult subjects with new infected foot ulcer (PEDIS 3-4), registered from 1<sup>st</sup> October 2012 up to 8<sup>th</sup> March 2013. The Registry allows the systematic collection of several baseline variables: age, sex, duration of diabetes, history of ulcers and amputation, end stage renal disease, smoking habits, ability to stand or walk without help, visual acuity, HbA1c, ulcer type, number and total size of infected ulcers, PEDIS grade, osteomyelitis and wound pathogens. Outcomes of interest were: death, major amputation, complete healing and non-healing with minor amputation. Multiple logistic regression was used to estimate the Odds Ratios (OR). **Results:** A total of 131 patients were registered (mean age 63 years [range 28-93], 68.2% male). Duration of diabetes averaged 19 years. 55.9% of patients had ischaemic or neuroischaemic foot and 64.2% had osteomyelitis. About 80% of the patients had only one ulcer and the mean size of all ulcers was 6.9cm<sup>2</sup>. More than half of cultures (52.6%) had one pathogen only and MS or MR Staphylococcus aureus were isolated in 43.3% of patients (n=97). Infection was severe in 28.2% of the patients. Impaired visual acuity was observed in 43.4% of patients and 6.5% of patients needed help to stand or walk. Among patients with a known outcome (n=80), 32.5% had complete healing, 20% still had infected ulcer, 7.5% died and 6.2% underwent major amputation. 10% of patients had non-healed ulcer with minor amputation. Median time to complete healing was 56 days (range 2-120]. Age and number of ulcers were associated with higher death risk (OR=1.08 and OR=2.68, p<0.050). Inability to stand or walk was highly associated with an increased risk of major amputation (OR=36.60, p<0.010). Impaired visual acuity significantly increased the risk of non-healing with minor amputation (OR=5.64, p<0.050). **Conclusions:** Our results show that inability to stand or walk without help increased the risk of major amputation and impaired visual acuity is a prognostic factor of non-healing with minor amputation.