

Metatarsal heads ulcers in diabetic patients . Retrospective study

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Objective: According to several previous studies and to our own experience, there is an increased incidence of ulcers at the metatarsal head level (76%). The main objective of this study was to determine in a well-characterized group of patients the association of clinical variables (diabetes type, presence of osteomyelitis, retinopathy, nephropathy, arterial disease, amputation, healing, presence of pulses, surgical treatment, offloading treatment and probe-to-bone) and ulcer type, according to local diagnostic and treatment algorithm **Patients and methods** We included a series of 75 diabetic patients with a single ulcer (74.6% male) with a mean age of 60.5 years. The duration of diabetes was 21.1 years, and 62.5% had osteomyelitis. According to the PEDIS classification, 22.6% belonged to grade II, 53.3% to grade III and 24% grade IV. The classification of these ulcers completely overlapped with the corresponding grading (II, III and IV) of the ROVI classification. Also, 28% of patients had retinopathy, 24% peripheral vascular disease (all with ABI > 0.7; 98.6% palpable pulses), probe-to-bone was positive in 74.6%. All subjects had neuropathy (two or more abnormal tests (monofilament, pin-prick and Rydell's tuning Fork). All ulcers were on the metatarsal plantar aspect. The association of clinical variables and ulcer grading was analyzed with the SAS software, v9.2, (SAS Institute Inc. NC, USA). **Results:** No significant association was observed between different levels of the ROVI classification with diabetes type, presence of arterial disease, presence / absence of pulses, type of surgery or offloading. However, there were statistically significant differences between the different grades and osteomyelitis, nephropathy, ulcer healing time, probe-to-bone test and amputation. Ulcer healing occurred in 89.9% of patients after an 8-week period, 5.3% required amputation and 4.7% healed after more than 8 weeks. **Conclusions:** The study shows a high rate of ulcer healing despite the high degree of ulcers with osteomyelitis. Classification of ulcers shows an association between clinical variables and relevant ulcer and patient outcomes.