

Patient and ulcer outcomes in the foot clinic: A 2 year follow-up study.

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Introduction: Foot ulcers are a common complication of diabetes and cause considerable morbidity and mortality. **Aims:** Following on from publication of baseline prevalence data on the same cohort ^[1] the primary aim of this study was to assess both ulcer and patient outcomes over a two year period. **Methods:** A two year, prospective study of 53 patients attending the out-patient diabetic foot clinic at Poole Hospital, UK. The patients' mean age was 68 years (range 28 - 94). Foot ulceration as graded by means of the University of Texas Wound Classification System and MRSA status were assessed at baseline (1st October 2005 to 28th February 2006) and at review (1st - 29th February 2008). In 18 patients with non-infected foot ulcers (11.1% treated with antibiotics) and 35 patients with infected foot ulcers (97% treated with antibiotics), we studied 3 outcomes:- (1) Patient outcome, whether still in clinic, discharged from clinic, lost to follow up, or died; (2) ulcer outcome:- whether healed, persistent infected or non-infected, revascularization or amputation; and (3) hospital admission rates related to complicated foot ulceration. **Results:** Differences in both patient outcome and ulcer outcome between the infected and non-infected ulcer groups are illustrated in Table 1. Antibiotic-treated patients showed higher all-cause mortality and amputation rates. Hospital admission rates were also higher in the infected group (12 patients (40%) compared to 3 patients (17.6%) in the non-infected group). The MRSA rate in patients also increased over the study period in both patient groups:- by 5/13 (38%) in the infected group and 2/6 (33.3%) in the non-infected group.

Table 1

	Patient outcome			Ulcer outcome	
	Antibiotic treated group (36) (Infected ulcers)	No Antibiotic group (17) (Non-infected)		Antibiotic treated group (30) (Infected ulcers)	No Antibiotic group (16) (Non-infected)
Discharged	12 (33.3%)	6 (35.2%)	Healed	9 (25%)	9 (56.25%)
Still in clinic	10 (27.7%)	5 (29.4%)	Persistent infected ulcer	9 (25%)	1 (6.25%)
Lost to follow up	1 (0.27%)	2 (11.7%)	Persistent non-infected ulcer	3 (10%)	4 (25%)
Death	13 (36.1%)	4 (23.5%)	Amputation	8 (26.6%)	1 (6.25%)
			Revascularization	1 (3.3%)	1 (6.25%)

Conclusions: Our data clearly demonstrates the high mortality (36%) and amputation rates (27%) in patients with infected diabetic foot ulcers over a 2 year period. Many infected ulcers seemed to persist despite the high standard of care received by the patients during the 2 years. Possible causes are antibiotic resistance and MRSA infection. Although non-infected ulcers have an overall better prognosis, the mortality in this group was also remarkably high (23.5%). Early intervention and appropriate antibiotic usage may not only help to improve patient outcome but also reduce the financial burden on the healthcare system.

Reference

1. Wong, M-L & Coppini, DV (2006). Diabetic foot ulcer infections: an audit of antibiotic prescribing in a diabetic foot clinic. *Pract Diab Int*: 23 (9), 401-405.