

Comparison of outcome of diabetic foot ulcer treatment in 3 different centres of North West England. M. Soliman<sup>1</sup>, G. Jones<sup>2</sup>, E. Jude<sup>3</sup>, S Rajbhandari<sup>1</sup>. <sup>1</sup> Lancashire Teaching Hospital, <sup>2</sup> East Lancashire Hospitals Trust, <sup>3</sup> Tameside General Hospital, UK. Diabetic foot ulcers are managed at different centres, the protocol may vary depending on availability of local expertise. This may affect the outcome of ulcers. To assess this we retrospectively studied the outcome of 50 diabetic foot ulcers that presented to 3 different centres in the North West England. The aim was to assess clinics outcome of diabetic foot ulcers. Methods: We retrospectively analysed the clinic notes of first 50 patients that attended 3 clinics of North West England from 1<sup>st</sup> January 2008. The list of patients that presented to the clinic was obtained from the hospital system and their notes retrieved. Data was collected in pre-designed form. If needed other hospital IT systems were checked. Results: Case notes of 148 patients (Mean age 66.3 ± 12.9 years & 33.8% Females) were studied. There was no difference (p >0.05) in age and sex of patients between these centres. Similarly there was no difference in HbA1c, total cholesterol, creatinine and blood pressure in patients. Table 1 shows the results comparing these 3 centres, which clearly shows improved outcome in Centre B.

| Parameter               | Centre A | Centre B | Centre C | P value |
|-------------------------|----------|----------|----------|---------|
| Healing by 12 weeks     | 34.8%    | 47.1%    | 19.6%    | 0.01    |
| Healing by 52 weeks     | 69.6%    | 86.3%    | 70.2%    | 0.09    |
| Total Death by 52 weeks | 4%       | 17.6%    | 17.3%    | 0.06    |
| Use of Cast             | 23.9%    | 72.5%    | 9.8%     | <0.001  |
| Presence of Infection   | 56.5%    | 47.1%    | 62.7%    | > 0.05  |
| Neuropathic ulcers      | 45.7%    | 74.5%    | 52.9%    | <0.01   |
| Amputation              | 17.9%    | 15.7%    | 7.8%     | > 0.05  |

Discussion: Our study shows that there was significantly more proportion of ulcers healed by 12 weeks in Centre B, which is due to extensive use of cast and higher proportion of neuropathic ulcers. This trend of improved healing continued for 52 weeks of the study. There was no difference in the presence of infection, proportion of and amputation rate between these centres. There was a trend for reduced mortality in centre C that could be due to more proportion females in that centre.

Conclusion: This study confirms that there is variable outcome of diabetic foot ulcers even within a small geographical area. This is mainly due to variable use of cast. Similar comparative studies are necessary in order to compare quality of care provided to patients with diabetic foot ulcers.