

[O10] INCREASING AGE AND UNDERLYING RENAL PROBLEMS ARE THE MAIN FACTORS FOR INCREASED MORTALITY IN DFU

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Aim: Diabetic Foot Ulcer (DFU) is associated with high mortality. The literature suggests that about 50% of subjects will die within 5 years of developing foot ulcer. The most common reason for death is cardiovascular disease. We wanted to study if there was high mortality in subjects with diabetic foot ulcer who attended our multi-disciplinary foot clinic with DFU. The aim of this study was to analyse the mortality rate in subjects who presented with diabetic foot ulcer in our multi-disciplinary foot clinic and to analyse risk factors associated with it.

Method: This was a retrospective audit on a randomly selected clinic population. Out of 2500 eligible subjects, 200 subjects with NHS number beginning with 4 were randomly selected. The date when they first came to the clinic was collected in the case of subjects who had multiple episodes of ulceration. Their status was noted in 2016 as dead or alive. If dead, the year of death was noted. This project was registered with the local regulatory board.

Results/Discussion: A total of 204 electronic patient records were studied on subjects who presented to the foot clinic from 2003 to 2013. Out of this cohort 70 (34.3%) subjects died [mean age of death 71 (+/- 8.5) years] at the median follow up point of 8 years following the first recorded episode of DFU. Further breakdown of this data, we found that 51.4%, 41.8%, 28.6% and 23.1% died at median follow up of 12 years, 9 years, 6 years and 3.5 years respectively. Subjects who died were older [67.0 (+/-8.8) years vs 64.2 (+/- 8.5) years; $p = 0.02$]. Out of all subjects 125 (61.3%) were males, but there was no gender difference in mortality ($p > 0.05$) in this cohort. We also did not find any difference ($p > 0.05$) in baseline cholesterol between subjects who died and those who were alive [4.1(+/-1.3) mmol /L vs 4.2 (+/-1.2) mmol/L]. There was also no difference in HDL cholesterol and HbA1c at baseline. The serum creatinine level was significantly higher in subjects who died [115.3 (+/- 54.3) vs 97.3 (+/- 43.3) micromol/L; $p = 0.01$] along with raised urinary albumin creatinine ratio [36.7 (+/-93.5) vs 12.6 (+/- 33.1); $p = 0.001$]. Four subjects with DFU were undergoing dialysis and all of them died during follow up.

Conclusion: Our recorded mortality is lower than published series. This is possibly due to aggressive treatment of cardiovascular risk factors in our cohort. We found that underlying renal problems were associated with increased mortality. Our study is limited by our inability to analyse cause of death as most patients died long after their care episode was complete with our team. Further studies are needed to analyse if mortality has improved in DFU with aggressive treatment of cardiovascular risk factors.