

P46

Long term outcomes of Charcot neuroarthropathy (CNA)

D Khan, EB Jude

Tameside Hospital NHS Foundation Trust, Ashton under Lyne UK

Background: CNA affects about 0.5% of the diabetic population and is associated with increased morbidity and mortality. We undertook a study to assess the complications and mortality in patients with CNA attending a specialist diabetic foot clinic. **Methods:** Retrospective study of patients diagnosed with CNA between 1996 and 2011. Follow up was until February 2012. Foot temperatures were performed at each visit. Data was obtained from medical records for complications, co-morbidities, duration of CNA, and treatment; including offloading, bisphosphonate therapy and amputations. **Results:** Of the 52 patients included in the study, 40 were male; 41 had type 2 diabetes. Mean age at diagnosis of Charcot foot and diabetes duration was 56.7 ± 11.5 years and 19.5 ± 5.3 months, respectively. 30 patients had CNA affecting the right foot. 7 had bilateral CNA; mean interval 32.7 months between episodes. Diabetic complications were as follows: 100% peripheral neuropathy, 69% retinopathy and 49% nephropathy. Treatment included: 17 had total contact cast, 12 aircast, 15 scotchcast; 15 patients given bespoke footwear. 18 patients were given bisphosphonate (BP) therapy. Mean duration of active CNA in patients who received BP therapy was 15.0 months compared to 17.4 months in those who did not. 19 patients had amputation; 11 minor and 8 major, of which 3 were bilateral amputations. 11 (22%) patients included in the study died during follow up. Mean age at diagnosis of patients who are alive vs. died: 55.4 ± 11.3 vs. 61.4 ± 11.3 years. Mean duration of active Charcot foot was 31.3 months in the survivors compared to 10.2 months in those who died. In the survivors: 25 had retinopathy, 22 nephropathy, 5 had an MI, 1 stroke, and 11 end stage renal failure (ESRF). Patients who died: 7 had retinopathy, 4 nephropathy, 4 had MI, 2 had a stroke, and 4 ESRF. **Conclusions:** This study has looked at outcomes of CNA patients following diagnosis and has shown a high mortality in this group of patients. In addition most patients have multiple micro and macro vascular complications which would explain this increased mortality. More importantly proper randomised control trials are needed to improve the care for these patients but also to reduced morbidity, amputations and mortality.