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Mortality in Asian Indians with Charcot's neuroarthropathy: a nested cohort prospective study.

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Abstract

AIMS: We studied mortality in individuals of diabetes with or without Charcot neuroarthropathy (CN). **METHODS:** People attending diabetic foot care facility with CN of foot (Cohort 1) were prospectively evaluated. Details pertaining to the duration of diabetes, microvascular and macrovascular complications, foot ulcer, amputation and mortality outcomes were recorded and compared with those without foot complications (Cohort 2) by multivariate logistic regression. **RESULTS:** Data for 260 individuals of diabetes with CN and 520 individuals without CN were analysed. Mean age at presentation with CN was 55.8 ± 9.1 years, and duration of diabetes was 12.9 ± 7.8 years. 39.8%individuals with CN had foot ulcer, and 15.3% had amputation. People with CN were younger $(55 \pm 9.1 \text{ vs. } 59.9 \pm 8.1 \text{ years}, p < 0.001)$ and had higher prevalence of microvascular complications. A total of 39 (15%) individuals with CN and 50 (9.8%) (p = 0.03) individuals without CN died during median follow-up of 40(24-51) months. People with CN had 2.7 times (OR 2.72, 95% CI 1.4-5.2, p = 0.003) increased mortality risk when matched for potential confounders. Prevalent CAD and low eGFR predicted higher mortality in people with CN. **CONCLUSIONS:** People with Charcot neuroarthropathy have almost three times increased risk of mortality despite being younger at presentation.

KEYWORDS:

Amputation; Asian Indians; Charcot neuroarthropathy; Diabetic neuropathy; Mortality

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