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A COMPARISON OF MAJOR AMPUTATION RATES AND OUTCOMES FOR INDIGENOUS AND NON-INDIGENOUS AUSTRALIANS IN A MAJOR TERTIARY HOSPITAL

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Aim: Indigenous Australians are at high risk of developing diabetes-related foot complications requiring major lower limb amputations. The aim of this study was to assess the incidence and outcome for Indigenous Australians and non-Indigenous Australians undergoing major amputations (MA) at the main tertiary hospital in North Queensland, Australia over a 16-year period.

Methods: This was a retrospective study assessing all patients who underwent a MA at The Townsville Hospital between 2000 and 2015. Clinical characteristics were compared using Pearson's χ^2 test and Mann Whitney U test. MA rates (per 100,000) were calculated using the census data as the standard population. Kaplan Meier survival analysis and Cox proportional hazard analysis compared the incidence of all-cause mortality among both groups.

Results: A total of 374 MA occurred between 2000 and 2015. Seventy MA occurred in Indigenous Australians and 304 occurred in non-Indigenous Australians. Indigenous patients were younger ($p < 0.005$), more likely to be females ($p = 0.002$), have diabetes ($p < 0.005$), end-stage renal failure ($p = 0.003$), and were more likely to die during follow-up ($p = 0.028$). Overall rates of MA in Indigenous and non-Indigenous patients with diabetes were 291.9 and 70.1 per 100,000 respectively. MA rates increased in Indigenous (~15%) and non-Indigenous patients (~50%) with diabetes between 2000-2007 and 2008-2015 ($p = 0.505$). Indigenous patients were at a ~2-fold greater risk of all-cause mortality ($p = 0.027$) compared to non-Indigenous patients. This association was lost in the multivariate analysis (HR 1.24 [0.82-1.89], $p = 0.314$).

Conclusion: The burden of MA has increased in North Queensland and is greater in Indigenous Australians.

Recent Publications

1. Singh T P, Morris D R, Smith S, Moxon J V and Golledge J (2017) Systematic review and meta-analysis of the association between C-reactive protein and major cardiovascular events in patients with peripheral artery disease. *European Journal of Vascular and Endovascular Surgery* 54(2):220-33.
2. Morris D, Singh T, Moxon J, Smith A, Stewart F, Jones R, et al. (2017) Assessment and validation of a novel angiographic scoring system for peripheral artery disease. *British Journal of Surgery* 104(5):544-54.
3. Singh T P, Vangaveti V N, Kennedy R L and Malabu U H (2016) Role of telehealth in diabetic foot ulcer management - a systematic review. *Australian Journal of Rural Health* 24(4):224.
4. Nair J J and Singh T P (2017) Sjogren's syndrome: Review of the aetiology, pathophysiology & potential therapeutic interventions. *Journal of Clinical and Experimental Dentistry* 9(4):e584-e589.
5. Singh T P, Vangaveti V N and Malabu U H (2015) Dipeptidyl peptidase-4 inhibitors and their potential role in the management of atherosclerosis - a review. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews* 9(4):223-9

Biography

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