Diabetes mellitus in foot burns

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Introduction

Currently, over 1 million Australians have diagnosed diabetes mellitus. This number is expected to triple by 2031 owing to our ageing population, growing obesity and sedentary behaviour. Lower limb sensory loss from ensuing neurovascular changes places these patients at high risk of accidental foot burns. Their impaired wound healing response also increases their risk of complications and delayed recovery.

Method

A retrospective cohort study was performed on all patients admitted to a major burns hospital with <10% total body surface area burns involving the foot during a 5-year period (March 2010 to March 2015). Diabetic and non-diabetic patients were compared in terms of their age, gender, other co-morbidities, length of admission, number of surgeries and complications.

Results

The mean length of stay for diabetic patients was three times that of the non-diabetic population. On average, diabetic patients required twice as many surgeries and experienced more systemic and graft-related complications (infection, cardiopulmonary issues) leading to more frequent graft failure.

Discussion/Conclusion

Foot burns in the diabetic population are associated with greater lengths of admission and complications than in non-diabetic patients. Early identification and multidisciplinary assessment to achieve tight glycaemic control and optimise cardiovascular health may be valuable in these patients, along with education on burns risk.

Key Words

Diabetes mellitus, foot burns, graft failure