Preventing Diabetic Heel Ulcers

Introduction
The most important neurologic finding in peripheral neuropathy is the loss of protective sensation. Peripheral neuropathy with loss of sensation is the major cause of diabetic foot ulcers and amputation. With the increased number of Residents diagnosed with diabetes and the impact on implementation of prevention strategies for heel ulcers, a comprehensive trial was conducted in an urban 289 bed long term care facility designated as a center for seniors with diabetes.

Diabetes cost the Canadian healthcare system $12 billion in 2010, and costs will rise to $16 billion by 2020.  

Objectives
To establish a heel ulcer prevention protocol for diabetic Residents in long term care.

About 15% of all diabetics will develop a foot ulcer in their lifetime.  

Methodology
Baseline:
- Inlow’s 60-second Diabetic Foot Screen (Screening tool)
- Prevalence of existing lower extremity diabetic foot ulcers (DFUs)
- Risk assessment for skin breakdown using PURS/Braden - explored additional risks
- Current costs of diabetic heel ulcers in facility

Resident Exclusions:
1. Any non-diabetic Residents
2. Any end-of-life stage Residents
3. Any Residents who ambulate independently

Resident Inclusion:
An offloading suspension boot(s) was provided to all diabetic Residents who met the following criteria:

- Resident questionnaire regarding comfort
- Staff feedback regarding ease of use and application

Conclusions
1. There were no incidents of diabetic heel/foot ulcers within the six months observation period.
2. Improvements of existing diabetic heel ulcers were observed.
3. Prevention costs were less than treatment costs.
4. Residents stated offloading suspension boots were comfortable.
5. Staff cited (a) ease of use, (b) ease of application, and (c) product availability as important influences on successful outcomes.

References

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