PROBLEM

Unravelled chronic edema leads to changes in the tissues that can cause skin breakdown - versus leg ulcers (VLUs), infection ( cellulitis) and potential hospitalization.¹

Lacking is the identification of VLU and necessity for compression bandaging to treat the underlying chronic edema.²

In 2005 Harrison et al found that 192 people receiving care for a leg ulcer in the community consumed 1 million dollars in nursing care services and $260,000 in hospitalization.¹

Current Situation in Canada

Using the how2track® system, Health Outcomes Worldwide (HOW) provided a retrospective analysis of the use of compression, mainly representative of the Ontario home care market. After the data integrity analysis process, 279 patients with 339 VLUs and 7938 treatments met the inclusion criteria for the data set. Several observations have been made:

1. There is a significant gap prior to initiation of compression bandaging which is neither cost effective nor clinically effective.³

2. Inconsistent use of compression bandages during treatment leads to longer time to heal and increased cost to health care system.⁴

Background

Risk factors for developing VLU include: sex, age, type of work, deep vein thrombosis, obesity, smoking, number of pregnancies, family history, immobility and trauma. Current in Ontario, 1.9 million people are over 65 and at risk for developing a venous leg ulcer (VLU). This population is expected to increase to 4.2 million by 2036.¹

Our aging population and increasing obesity rates necessitates the use of evidence based, cost-effective treatment plans.

Compression bandaging is the cornerstone of treatment for chronic edema VLUs.³ Inconsistency in the use of compression bandaging leads to delayed wound healing, impacting our limited health care budgets.

Evidence-based Protocols

Harrison et al demonstrated in 2005 that implementation of an evidenced-based protocol in the community more than doubled three month healing rates from before implementation (23%) and the year afterwards (56%).The number of nursing visits per case declined from a median of 37 to 25.²

Implementation Strategies

Outcome Based Pathways

Outcome Based Pathways are a mechanism for promoting adherence to best practice, reducing variation in care and client outcomes.

In the Venous Leg Ulcer Pathway adopted by Ontario Community Care Access Centres (CCACs), overall pathway outcome is wound closure.⁵

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Cost-effectiveness

Clients that used Coban 2 as the compression product for treatment had significantly lower human resources cost (p-value= 0.0267), significantly fewer nursing visits (p-value=0.0113) and a marginally significantly shorter length of stay once compression was initiated (p-value=0.0885) in the compression phase of wound treatment. There was no statistical difference in total wound care product costs.²

Client Preference (Moffatt et al found in 2006)

72% of patients preferred Coban 2 to Profore.

Statistically less slippage with Coban 2 compared to Profore.

Improvements in the HIQOL Physical Symptoms and Daily Living scores were significantly higher with Coban 2 Layer Compression System compared to Profore.²

CALL TO ACTION

✓ Recognition that chronic edema is a chronic disease that needs to be managed similarly to diabetes, heart disease, cancer etc.

✓ More robust data vs retrospective in nature - to gain an understanding of the true prevalence and incidence of chronic edema and related clinical and social implications.

✓ Client engagement for maintenance of this chronic condition.

References

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2. Reference: 3M Canada, April 2013.


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15. Reference: 3M Canada, April 2013.


17. Reference: 3M Canada, April 2013.


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32. Reference: 3M Canada, April 2013.


34. Reference: 3M Canada, April 2013.

35. Reference: 3M Canada, April 2013.