INTEGRATING EARLY USE OF AN INNOVATIVE ADJUNCTIVE THERAPY INTO VENOUS LEG ULCER PATHWAYS: A PARADIGM SHIFT

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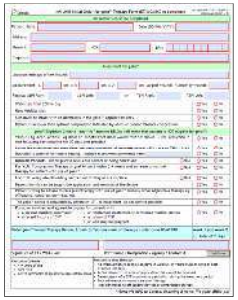
Background

Outcome-based pathways facilitate the delivery of evidence-based care and prevent gaps in treatment. In addition to appropriate assessment and timely use of treatment interventions, they provide expected clinical outcomes and timeframes (1). In Ontario, the provincial Venous Leg Ulcer (VLU) Pathway allows 12 weeks to heal (2). Unfortunately, at best, only 54% of patients with VLUs will be healed at 12 weeks. Twenty-two to 38% will remain open beyond 24 weeks.

The Mississauga Halton Local Health Integration Network (Mississauga Halton LHIN) Home and Community Care program added the geko™ Wound Therapy Device, an innovative Muscle Pump Activator (MPA) to their formulary in July of 2017. Image 1 shows the eligibility criteria/ order form that was developed.

Image 1.



Problem

Although the eligibility criteria identified VLU patients whose wound had not decreased in surface area (Length x width) by 30% at 4 weeks, an audit of utilization at 6 months showed that most patient referrals for this device were for those already in the Maintenance Pathway, or more than 14 weeks after admission.

At the same time, the Waterloo Wellington LHIN Home and Community Care program had completed a small evaluation with the same device, new patients on service less than 30 days. Ten patients, all with Chronic Venous Insufficiency had accelerated healing with the MPA device, averaging a 37% weekly decrease in wound size.

Ninety percent of the patients achieved wound closure in an average of 3 weeks/wound or 4 weeks/patient. These results support using the geko™ Wound Therapy device earlier in the VLU pathway, but WHICH patients should receive it as a front-line therapy? It is now possible to identify at admission those patients who are at risk of NOT healing by 24 weeks using the validated VLU Risk Assessment Tool (VLURAT) http://www.vlur-risk-tools.org.au/ (4,5).

Goals/Objectives

1.To stratify the degree of risk a new patient with a VLU (ABPI > 0.5 and < 1.3) would have of not healing at 24 weeks with best practice therapy as being either low, moderate or high, using the Venous Leg Ulcer Risk Assessment Tool (VLURAT).

2.To evaluate the effect the geko™ Wound Therapy device has in combination with best practices in reducing the projected healing times.

Methods

Ethics review is underway. One Nursing Agency (CarePartners) with previous experience in evaluating the geko™ device (6), has volunteered to use the VLURAT at the time of admission in conjunction with the standard lower leg assessment tool. The desired sample size is 30. Patients who are identified as being low risk of not healing at 24 weeks will be provided with geko™ Wound Therapy Devices by Perfuse Medtec Inc. Patients with Moderate to High risk of not healing at 24 weeks will have geko™ Wound Therapy devices provided through the Mississauga Halton LHIN. The Eligibility Criteria has been modified as shown below.

Both groups of patients will receive the device for up to 8 weeks, as per the Mississauga Halton LHIN policy.

Outcomes Measurement

1. ABPI and VLURAT score
2. The percentage of wound healing pre-geko™ implementation and with geko™
3. Photographs of the Wound (close-up and whole limb)
4. Edema measurements mid-foot, smallest ankle and largest calf
5. Pain and Neuropathy scores
6. Patient satisfaction interviews
7. The dressing frequency/ Nursing visit frequency / # of visits
8. Length of stay

Conclusions

The implication would be whether a paradigm shift has occurred, considering the early use of adjunctive therapy. If the results are compelling at the end of 6 months a decision will be made to implement this as a standard of care for the Mississauga Halton LHIN VLU Wound care Pathways.

References

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