Ontario
Mississauga Halton Local Health Integration Network
Réseau local d'intégration des services de santé de Mississauga Halton

Early Intervention with the geko™ device for Venous Leg Ulcers Predicted to Not Heal Within 24 Weeks

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geko™ wound therapy

Aim

Quality Improvement Initiative aimed at enhancing policies and procedures so that patients can receive the most timely and effective practice to ensure or achieve better outcomes.

Procedure/Method

Earlier use of the geko™ device was employed on patients whose venous leg ulcers (VLU) that had an elevated risk of failure to close within 24 weeks. Patients were admitted to community clinic settings at 2 Ontario nursing agencies. Eleven patients were assessed twice over two weeks using a Validated Leg Ulcer Risk Assessment tool (VLURA). Moderate to high risk scores had geko™ devices added to their standard of care for a maximum of 12 weeks. Low scores were reassessed in two weeks; those increasing to moderate were started on the geko™ device.

Validated Leg Ulcer Risk Assessment Tool

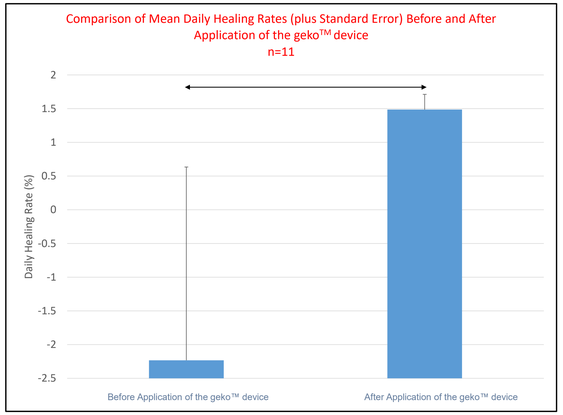
(adapted)

- Score is 11 or higher: high risk of not healing at 24
- Score is between 6-10: moderate risk of not healing at 24 weeks
- Score is 5 or less: low risk of not healing within 24 wks

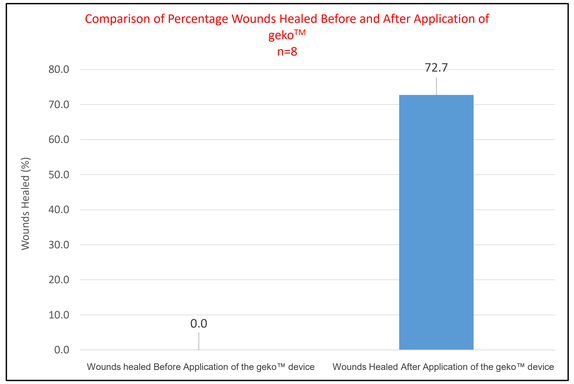
Findings/Results

- Frequent delays in the geko™ device initiation were related to a routine LHIN policy need to access vascular studies
- An average of 48.9 days elapsed between admission to device application
- Ten out of eleven patients experienced increased risk scores within the two weeks between initial and follow-up visit
- Preliminary results indicate a total of 12 wounds in 11 patients (80%) healed
- 2 wounds (13%) remained open with an average decrease in size of 88%
- One wound (6.7%) reopened
- Without use of the geko™ device the average time for VLU closure in MH LHIN is 15 weeks
- Healing time with the geko™ device is an average of 12 weeks

Healing Rates Before and After geko™ Application



Percentage Wounds Healed Before and After geko™ application



Implications/Applications

- Delays in access to timely care negatively impact wound healing
- Implementing a VLURA tool on admission identifies wounds with the greatest risk of failure to close
- Early intervention using the geko™ device improves healing outcomes and decreases nursing visits
- Delay in the geko™ device initiation was related to clinician access to vascular studies/ABPI
- More work will need to be conducted to explore this further, particularly with the geko™ device application immediately upon referral

References

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