Management for People Living with Chronic Lower-limb Ulcers

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Managing chronic lower-limb ulcers involves using both best practice guidelines and strategies for pain management. Wounds Canada's Best Practice Recommendations support the identification of strategies for the effective management of complex issues related to non-healing arterial and venous ulcers of the lower extremity. Clinicians are advised to conduct a comprehensive assessment of the patient, including a complete history of physical and psychosocial factors, as opposed to focusing only on the wound.

A Patient Priority Approach

Even when managing the local wound becomes the physician's priority, pain management is often the patient's priority. To encourage patient engagement in the process of healing, their priorities of care have to be put first. The management of pain should include consideration of the following: pain from infection, pain from the wound and skin, and neuropathic pain. This may involve multi-level and targeted strategies.

Additional strategies that can be beneficial in managing lower-extremity ulcers, once vascular status is verified to be adequate, are conservative sharp-wound debridement and compression. Wound debridement can be carried out in a variety of ways, can facilitate wound bed preparation and the removal of wound debris and biofilm that contribute to infection, and can stimulate the wound healing process.

Compression, when used appropriately and when adequate blood flow has been confirmed, can decrease overall pain by decongesting tissues, reducing the stretching of the skin in the lower extremities and minimizing the occurrence of stasis dermatitis. In the presence of peripheral arterial disease (PAD), however, compression therapy can increase pain.

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Several barriers need to be addressed to align current practice with best practice recommendations. The more traditional approach to wound management has tended to focus on dressing choices and treating primarily the local wound. This fails to acknowledge the underlying complexities that contribute to the overall healing of a wound. Traditional practice also tends to be based on a clinician-centred approach, rather than a patient-centred one that engages the patient. A best practice approach emphasizes the

need for the patient's understanding of the process, which empowers them to participate in how treatment is carried out. Overcoming barriers to change through a multidisciplinary approach and prioritizing the patient's story can facilitate this empowerment. The treatment that follows needs to be comprehensive and focused, and should always be guided by best practice recommendations.

Addressing Pain

As discussed, managing wound-related pain is important to the healing process. Up to 65% of slow- or non-healing wounds cause severe or persistent pain, which is often considered the worst part of living with a chronic wound.[1] Wound-related pain can have a major impact on sleep, mood, appetite and activity. One approach to classifying pain looks at its duration. Procedural pain is hyper-acute and does not last long; it is often experienced during cleansing, wound debridement and dressing changes. There is strong evidence for use of a combination of 2.5% lidocaine/2.5% prilocaine applied 30 to 45 minutes *before* dressing changes.[2] In the case of multiple and/or large ulcers, clinicians should exercise caution to remain within the recommended safe dosage.

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Management of persistent pain can be challenging. The abbreviation ABCD offers a useful, simple approach:[3]

- **A = Assessment** means verifying if the pain is coming from the wound bed or surrounding area, identifying how long the pain has existed and how intense it is, as well as any impact it is having on quality of life. It is also important to determine the nature of the pain: nociceptive (sharp, aching, gnawing) or neuropathic (tingling, pins and needles, electric). This distinction will help to guide the choice of systemic pain medications.
- **B = Beware** of contributing factors such as edema and ischemia.
- **C = Consider** local dressings that support the wound healing environment and topical analgesics.
- **D = Drugs**, oral and parental.

Topical Medications

Topical medications present an attractive option, especially in geriatric populations, because the potential side-effects are fewer and less severe than with oral and systemic medications. Unfortunately, two limitations apply to most topical treatments:

- Individual response is unpredictable.
- The degree and duration of benefit is highly variable.

One exception is the application of an ibuprofen foam dressing. Randomized controlled trials have shown good evidence for their safety and efficacy.[4] This dressing has a quick onset (24–48 hours)

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with no more reported side-effects than other plain foam dressings. Another promising topical option is 4% lidocaine in a TRI-726 matrix.[5] This topical agent has demonstrated a much longer lasting therapeutic effect than similar topical treatments. It should be applied only once a week. No large or quality-controlled studies currently support the use of other topical treatments.

Oral and Systemic Medications

NSAID is an effective pain reliever if infection is the underlying causing of the pain. However, its use is absolutely contraindicated in the presence of renal insufficiency and poorly controlled hypertension. There is strong evidence for both pregabalin and gabapentin as first-line agents in the management of neuropathic pain, but the incidence of side-effects, such as sedation and visual disturbances, can be high in the geriatric population.[6] Therefore, discussing the benefit and risks with patients is important before prescribing, as is encouraging the reporting of all side-effects. Another option is nortriptyline (a tricyclic antidepressant).[6] All agents targeting neuropathic pain need to be started at a lower dose with a slow upward titration as needed. It may therefore take weeks before the optimal effect is reached or a decision made that this treatment is not effective.

Opioids have a limited role to play in managing wound pain. Short term (< 7 days) use of oral opioids as part of a multimodal protocol is acceptable as per the 2017 Canadian opioid prescribing guidelines.[7] Frequent dosing (q4h/PRN) of short-acting medications is thought to be generally safer compared with longer-acting agents. The goal with opioid therapy is improving quality of life. If pain is improved but quality of life is worse or remains unchanged, the clinician should stop prescribing and reassess.

Each of these options can support health-care professionals in managing pain associated with wounds. Developing a patient-centred plan of care, which includes managing the various types of pain and adopting current best practice guidelines such as those published by Wounds Canada, can optimize the care for patients living with lower limb ulcers. ■

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