

Ten top tips: palliative wound care



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Wounds are a common occurrence in patients with terminal illnesses. Of the more than 1.6 million patients who receive care from hospice programmes across the United States, nearly 1 in 3 patients suffer from some form of wound as they near the end of life. In home-based palliative care settings, pressure injury/ulcers are perhaps the most common wound, with reported prevalence and incidence rates at 13.1% and 13.0%, respectively (Artico et al, 2018a).

In the hospice and palliative care setting, the comfort and care preferences of patients are always the primary focus of care providers. Throughout the span of a patient's care, and as terminal illness progress, bodily wounds may occur. Wounds, if left untreated or improperly cared for, impact patients not only physically, but psychosocially as well, and can erode the quality of life that remains for the patient who is dying. Proper wound care provides healing for not only the body, but for the whole person. These top ten tips will provide guidance on how and when to care for the wound in a dying patient.

1 Appreciate that this wound may not follow the usual trajectory of healing: Most healthcare providers are called in to care for patients in whom wound healing, while delayed, is still possible. Aggressive treatment plans are implemented to facilitate the healing process. Patients who are dying and have existing wounds differ from the usual patient seen by clinicians. These wounds are at significant risk of not healing or deteriorating. The skin of dying patients can be fragile, failing and sensitive, and is subsequently at risk of being compromised from wound exudate, body fluids, pressure, shear and friction (Hughes, 2005). The provider must also adjust their usual treatment plans in light of the goals for care. Once the goals of care are established, aggressive treatments may be indicated for symptom management. Ideally, to maintain comfort and reduce pain, dressing changes are done infrequently. Patients receiving hospice services can sometimes heal wounds, but this is not always an achievable outcome.

2 Establish wound-specific goals with the patient and family: Wounds, and the end-of-life process, affect the patient's whole

person, as well as the lives of family, friends and caregivers. Hospice and palliative care organisations employ a multidisciplinary team of healthcare professionals and various care practices to improve the physical, emotional, social and spiritual wellbeing of all who are on the end-of-life journey. Interdisciplinary is preferred as the team uses each other's expertise to create common and cohesive goals, rather than multidisciplinary, where each team member creates individual goals. This interdisciplinary team should be utilised to assist in creating appropriate wound-specific goals and reasonable outcomes. Patients should have an individualised, systematic approach to assessment, planning, treatment and evaluation of their wounds in the context of their life-threatening illness. Be clear about the probable deterioration on the wound, considering the comorbid conditions of the patient. Discuss the patient's nutritional status, perfusion, infections, and cancer as the deterrents to healing [Figure 1]. Given the underlying life-threatening condition, wounds and the nature of pain associated with the wound should be fully assessed, described, and an appropriate plan of care established. Setting mutual goals for healing is best done with an interdisciplinary team that includes the patient and family. Some of the roles of team members are as follows: the physician should address outcomes of untreated wounds, such as sepsis or infection; the chaplain provides support for suffering, private religious sacraments; the social worker can assist with procuring any needed money for products; physical therapists are used to prevent contractures and promote mobility, and the pharmacist can assist with identifying compoundable products for the wound bed. Nurses can aid in planning how and when wound care will be done, as well as assess the family's desired involvement with wound care and other cares. Not all wounds fail to heal or deteriorate. Dincer (2018) reported that 74% of 227 patients in hospice healed pressure injury. Artico et al (2018) also studied the outcomes of pressure ulcer/injury in palliative care and reported that 13% of patients in home palliative/hospice care acquired an ulcer and found 24.6% of the ulcers that occurred prior to 7 days before death healed. In this particular study, no ulcer that occurred within 7 days of death healed.

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Figure 1. These unstageable pressure ulcers/injuries will not heal in this patient. They were treated conservatively and remained unchanged up to the time of her death.

3 Be conscientious of risk for developing wounds other than from pressure: While pressure injuries are common in patients who are dying, they are not the only wound the patient is at risk of developing. New onset urinary or faecal incontinence can lead to incontinence-associated dermatitis, and growing cancers can extrude and lead to odorous and disfiguring wounds. Patients with end-stage renal disease frequently discontinue dialysis, and develop high serum levels of urea. Urea is then excreted through the skin (uremic frost), leading to significant itching and scratching by the patient, creating open wounds on the skin. Patients with diabetes are still at risk of diabetic foot ulcers from improper footwear. Patients with end-stage heart failure, renal failure and liver failure are at risk for excessive fluid retention, which can lead to cellulitis, weeping oedema and maceration of skin. Patients who have skin folds that are not adequately aerated are at risk for intertriginous dermatitis. As always, any impairment in skin is a risk for an infection to develop. Treatment of these conditions are beyond the scope of this paper. Please refer to these references for further information — Black, et al, 2011; Falodun, 2011; Finlayson, 2017; Watanabe, 2016. Fragile skin is also at increased risk of skin tears.

4 Determine the level of preventive care that will be provided: Pressure ulcer/injury is a common wound seen in the dying patient. A retrospective study reported that PI was present in 94 (61%) of patients on discharge from the hospital to palliative care (Dincer, 2018). Terminally ill patients are often at high risk for developing pressure ulcers/injuries (Hotaling and Black, 2018). The patient who is actively dying, or near death, may have a very different set of risk factors for developing pressure injuries, such as malnutrition/

dehydration, compromised tissue perfusion due to extensive organ failure, urinary or fecal incontinence, altered mental status, and significant respiratory distress. The prevention of pressure injury for terminally ill patients is not only a clinical issue, but an emotional and ethical issue as well. Pressure ulcers are painful, causing suffering and complicating the care and quality of life for the dying patient. Emotional concerns for family members of terminally ill patients surface because they can view pressure ulcer/injury formation as a failure on the part of the healthcare staff caring for the patient or even as their own failing if they are responsible for providing care. Hospice staff may feel that turning a patient frequently may contribute to an increase in pain, so standard preventive measures, such as turning a patient every 2 hours, may be suspended. In fact, some staff feel that prevention and treatment could potentially compromise the overall hospice philosophy of providing comfort care. Discuss the prevention plan with the patient and family. Patients should be on an appropriate support surface. Consider alternating pressure if the patient does not move, high immersion if they are cachectic and low air loss if they are diaphoretic. They may be turned every 3–4 hours, rather than every 2 hours (Langemo, 2015). Explain to the patient and family that while turning can be suspended to promote comfort, pressure injury is a painful condition. Discuss the risk benefit ratio of not changing dressings or moving the patient with the individual. Ideally, a balance can be found between movement and pressure injury formation. Small movements, such as moving a single pillow, can often help.

5 Formally assess the wound when it is convenient for the patient: Most wound care assessments are completed weekly. However, the reason for the timing of assessments is to guide changes in the treatment plan to promote healing. Because healing may not be the goal, the size of the wound is less important. It is important to examine the wound for deterioration, so that the proper topical products and right size dressings can be used; however, this assessment should not follow the clock, but rather follow the patient. For example, if the formal wound assessment should be completed tomorrow morning, and the nurse is changing the dressing today, assessments should also be completed today. If the system's policies mandate a weekly measurement, write in a narrative the wound will be assessed with next dressing change. It is helpful for communication purposes to include an individualised wound assessment in the nursing care plan.

6 Prevent procedural wound pain: The prevention and treatment of pain during procedures is one of the greatest areas of unmet need within wound management. Wound-related pain is often exacerbated with dressing changes (Cutting, 2013) and the pain can persist for a long time (in some cases over 6 hours) (Price, 2008). Anxiety contributes to the anticipated pain (called nocebo hyperalgesia). To reduce anxiety, address emotions, anticipation or negative expectation of discomfort (Woo, 2015). Dressing materials can adhere to the fragile wound surface due to the glue-like nature of dehydrated or crusted exudate thus requiring high peel force for removal. In addition, the granulation tissue and capillary loops may grow into the contact layer, especially with gauze dressings and with the use of negative pressure wound therapies, rendering mechanical trauma upon removal (Woo, 2008). Careful dressing selection and use should negate these problems. Dry gauze is rarely used; most products used now are interactive and should not result in the dehydration and crusting described.

Combinations of systemic pharmacological agents should be considered based on acute pain severity, coexisting nociceptive and neuropathic pain, and chronic inflammation in the wound. It takes five half-lives of an analgesic agent to reach a steady state (Woo, 2013). Estimate the required doses to manage continuous stable pain after a titration period with short-acting preparations. Controlled release medications can facilitate around-the-clock dosing, especially at night. Nonetheless, short-acting medications should still be made available for occasional breakthrough pain. Communication is vital between the healthcare provider changing the dressing and the nurse or family member responsible for medication administration. Patients in a hospice may have access to sublingual narcotics for acute pain, which can be given with adequate time to fully work prior to the dressing change, and can continue to be given, per the order, for the duration of acute pain with the dressing change.

7 Manage baseline wound pain: Baseline wound pain is felt when there are no treatments being done. This form of pain can be neuropathic, ischaemic or inflammatory. There are more options for pharmacologic management for chronic pain, including anticonvulsants (gabapentinoids), antidepressants, benzodiazepines, N-methyl-D-aspartate (NMDA) receptor antagonists, nonsteroidal anti-inflammatory drugs, skeletal

muscle relaxants and oral, transdermal, transmucosal, intranasal and sublingual opioids. These medications should be provided around the clock.

8 Manage odour and excessive drainage associated with the wound: Other distressing symptoms from a wound are odour and exudate. Odour from tissue necrosis or infection is reported to cause gagging, vomiting, weight loss, social isolation, and withdrawal among individuals and their caregivers and leads to poor quality of life (Lo, 2012). Topical metronidazole, activated charcoal and honey are indicated for odour management. They can be formulated into gel or crushed from tablets and placed into the woundbed (Paul, 2008; Watanabe, 2016) At times, conservative debridement of odorous necrotic tissue can be helpful. Occlusive dressings can also help manage the odour outside of the time of dressing change. Consider broader ways of managing odour within the care setting, use of deodorisers etc.

Excessive drainage can lead to the need for frequent dressing changes and the proteases in wound exudate can damage periwound tissue. Choose dressings that are highly absorbent to gain wear time. There is some research on various brands of superabsorbent dressings, however data from palliative care settings was not found (Barrett, 2018; Münter, 2018). If the healthcare provider is anticipating bloody drainage, it is beneficial to use red or dark towels to prevent significant distress to the patient or family. Almost all humans are distressed by bloody drainage, and this sight can cause emotional pain or guilt.

Kelechi and colleagues (2017) studied the use of a compound natural powder extract composed of *Calendula officinalis* L and *Arnica montana* L as active ingredients with *Mentha arvensis* and *Santalum album* as inactive ingredients. The study was conducted in the US and reported significant reductions in pain, odour and volume of drainage with improvement in quality of life.

9 Prevent dry gangrene from becoming wet gangrene: Gangrene occurs due to reduced blood supply in the body tissues that leads to necrosis. This condition may arise because of an injury, infection, or other health conditions. It is especially common in patients with arterial disease and diabetes. Utilise the physician and other members of the multidisciplinary team to establish risk for and prevention of gangrene. Gangrene is classified as dry, wet, or gas gangrene. Dry gangrene is the least harmful and has a potential to become infected due to moisture absorption from the surroundings (Whabi, 2018). Wet gangrene

is dead tissue that is invaded by bacteria, which enter the tissue via moisture. Wet gangrene needs emergent care by a provider, unless the goals of care are to completely avoid use of antibiotics and/or other intensive care measures. If this goal has not been made overtly clear to all parties, including family, assume the patient wants to be treated. Gas gangrene is an anaerobic bacterial infection, and is more invasive than wet gangrene. The same medical attention is necessary for gas gangrene, unless clearly stated otherwise by patient and/or family. Use dry dressings around areas of dry gangrene. While auto-amputation is possible, the process is quite long and can be painful, and should not be considered the primary treatment measure for gangrene.

10 Discuss potential outcomes of not aggressively treating the wound: It is a common practice to change approaches to the wound upon placement into hospice and palliative care. Very conservatively treating open wounds combined with stopping antibiotic therapy can set the stage for the development of infection, osteomyelitis and sepsis. When setting goals for the patient, anticipate the development of infection in the wound and ask prior to the infection being present, how the family and patient want to address it (e.g., antibiotics). Then when the infection is present, these decisions were already in place. Often, advanced directives will contain the preferred avoidance of intubation, cardiopulmonary resuscitation, dialysis and artificial feeding, but seldom, if ever, does the document provide guidance on the treatment of infections either by local or systemic measures.

Conclusion

Wounds are common at end of life. It is important for the healthcare provider to set realistic expectations on the outcome of the wound, temper their aggressiveness in the treatment phase and allow the patient and family to determine symptoms of the wound needing the most care.

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