The assessment and treatment of wound pain

In this article...
- How to assess a patient for wound pain
- The different types of pain
- Pharmacological and non-pharmacological strategies

PART 3 OF 6: WOUND MANAGEMENT

Author
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Abstract

This article is the third in a series on wound management. Poor pain management leads to distress and can impede the healing process. This article describes the different types of pain and the psychological aspects of pain that should be taken into account when deciding on a wound-management strategy. It discusses assessment tools, along with pharmacological and non-pharmacological interventions for pain management.

Many patients with wounds suffer from pain that is often underestimated or poorly managed, due to nurses focusing on the wound itself rather than the whole person (Johnson, 2009; Scheinfeld, 2005). Pain management should form the first part of the assessment and is an ongoing process; effective pain management requires assessment of the cause, nature, frequency, timing, site and severity of the pain and how it is affecting the patient’s life (Keast, 2009).

Non-verbal cues, such as grimacing, guarding the area and restricted movement should also be noted (Brown, 2014). Pain is not simply a physical sensation – it also has psychological and emotional aspects. Table 1 indicates the three dimensions involved in the pain experience.

There are several types of pain, which fall broadly into two main categories: nociceptive and neuropathic. Acute nociceptive pain is the first sensation felt as a result of tissue damage and usually passes quickly. Neuropathic pain is caused by an abnormally strong response by the nervous system and may be caused by trauma, infection, a metabolic disorder or cancer (Wounds International, 2004). Patients with long-standing wounds tend to suffer from both types of pain. It is important to determine which type of pain the patient is experiencing as they need different treatment approaches (Table 2).

Differentiating between nociceptive and neuropathic wound pain can be difficult, but is important if the pain is to be managed effectively. The following questions assess whether the pain is neuropathic (adapted from Bennett, 2001):

- Is the skin or wound abnormally sensitive to touch?
- Does the patient feel unpleasant sensations when the skin is lightly stroked or touched?
- Does the patient describe the pain as “like a pin prick”, tingling or pins and needles?
- Does the pain come in sudden bursts for no apparent reason?
- Does the patient describe the pain as feeling “hot” or “cold”?

The following questions, adapted from White and Harding (2006), can be used to ascertain nociceptive pain:

- Has the patient got an underlying condition such as ischaemia or tissue damage?
- Has the patient’s wound been present for a long time?

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5 key points

1. Research has shown that pain is badly managed by health professionals.
2. Pain assessment should be a priority when assessing a wound.
3. Patients need regular monitoring until the pain is under control.
4. Patients may need a combination of strategies to manage their pain.
5. Nurses need a good basic knowledge of analgesia to ensure that wound pain is managed in an effective way.

Patients who have experienced a painful dressing change before can become tense.
Nursing Practice

Review

Before, such as a dressing change, will have experienced a painful procedure during the healing process (Eagle, 2009). Patients who have experienced a painful procedure before, such as a dressing change, will remember this and become tense and anxious, anticipating the pain again; this may result in increased pain (Brown, 2014).

To minimise pain during dressing changes, staff can:

- Avoid applying products that may stick to the wound, such as dry gauze, film dressings or paraffin tulle dressings (Bethell, 2003);
- Reduce any draught from windows or sudden change in temperature, and avoid prodding or poking the wound; this will minimise excessive stimuli to the wound;
- Handle the wound carefully and only cleanse if necessary; be aware that even the slightest touch can cause extreme pain (hyperalgesia);
- Where possible, use dressings with a silicone coating, which are designed to minimise pain on dressing removal;
- Treat any wound infection promptly and ensure any excess exudate is managed appropriately;
- Do not allow dressings to dry out; change them according to the manufacturer’s wear-time instructions;
- Protect wound margins with skin-barrier products to avoid excoriation, which can be extremely painful;
- Consider whether individual patients could remove their own dressings at their own speed;
- Reassure the patient that you will stop the procedure when asked to do so;
- Use adhesive removal products such as Appeel (CliniMed) to assist in removing adhesive products.

Psychological aspects of pain

Pain is complex and is influenced by many factors, such as emotion, social background and what the meaning of the pain is to the patient. A patient experiencing pain as a result of cancer will perceive their pain differently from a woman with labour pain (Callister, 2001). Age can be a factor, as many older patients believe pain in old age is normal and will decline analgesia (Price, 2006; Price et al, 2008). A patient’s culture also plays a part, influencing how pain is perceived and expressed. Nurses need to be aware of these factors and, together with the patient, develop a pain-management strategy that may involve pharmacological and non-pharmacological interventions acceptable to the patient (Callister, 2003).

Worrying about the cause of the pain is common and when pain is not managed effectively, such as in the case of chronic wounds, patients may become depressed, experience difficulties with concentration or have a poor sleeping pattern (Mason, 2006). These responses adversely affect the healing process (Eagle, 2009). Patients who have experienced a painful procedure before, such as a dressing change, will remember this and become tense and anxious, anticipating the pain again; this may result in increased pain (Brown, 2014).

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Strategies to manage wound pain

When analgesia is used to treat wound pain, its effectiveness must be reassessed frequently. Several types of analgesia can be used to manage wound pain and selection should be based on the type of wound, whether it is acute or chronic, and the level of pain the patient is experiencing.

TABLE 1. DIMENSIONS OF THE PAIN EXPERIENCE

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>Develops in frontal lobe of cerebrum</td>
</tr>
<tr>
<td>Affective</td>
<td>Limbic system</td>
</tr>
<tr>
<td>Sensory</td>
<td>Nociceptive system</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What is causing this pain?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relays messages to the brain to locate the source of the injury</td>
</tr>
<tr>
<td>Produces emotional response</td>
</tr>
<tr>
<td>Produces the pain sensation</td>
</tr>
</tbody>
</table>

My wound hurts!

TABLE 2. TYPES OF PAIN

<table>
<thead>
<tr>
<th>Type of pain</th>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background</td>
<td>Usually nociceptive depending on cause</td>
<td></td>
</tr>
<tr>
<td>Incident</td>
<td>Nociceptive</td>
<td>Pain that occurs during everyday activities, such as walking or even coughing</td>
</tr>
<tr>
<td>Procedural or operative</td>
<td>Nociceptive</td>
<td>Pain that results from procedures such as wound cleansing or dressing changes</td>
</tr>
<tr>
<td>Hyperalgesia</td>
<td>Neuropathic</td>
<td>Heightened or abnormal response to a painful stimulus</td>
</tr>
<tr>
<td>Alloodynia</td>
<td>Neuropathic</td>
<td>Constant pain results in extreme pain from a normal stimulus, for example, lightly brushing against the skin next to a wound</td>
</tr>
</tbody>
</table>

FIG 1. THE ANALGESIA LADDER

<table>
<thead>
<tr>
<th>Pain persisting or worsening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1 Non-opioid +/- Adjuvant analgesic</td>
</tr>
<tr>
<td>Non-opioids, such as paracetamol and NSAIDs, such as ibuprofen</td>
</tr>
<tr>
<td>Weak opioids, such as codeine, dihydrocodeine</td>
</tr>
<tr>
<td>Strong opioids, such as morphine</td>
</tr>
</tbody>
</table>

Adapted for wound pain by Senecal (1999)
Instead of administering analgesia when the pain starts, analgesia must be given regularly and at the appropriate dose, particularly in chronic pain, to ensure continuous pain relief. Non-steroidal inflammatory drugs (NSAIDs), such as aspirin, ibuprofen or diclofenac, are particularly useful for managing pain as they dampen down the inflammatory response. However, they may not be suitable for long-term use due to their side effects. Senecal (1999) produced an adapted version of the World Health Organization cancer analgesia ladder (Bit.ly/WHOPLadder), to aid selection of analgesia for wound pain (Fig 1).

In addition to analgesia, there are many non-pharmacological treatments that can help to reduce wound pain. These range from simple distraction techniques, such as listening to music or watching TV, to alternative therapies that work holistically and induce a state of relaxation (Table 3).

Conclusion
Assessing pain should be the first priority in managing wounds and should not be a one-off process. Regular reassessment and adjustment of analgesia regimens are essential until the pain is under control. Uncontrolled pain can have a considerable effect on the patient’s wellbeing and may delay the healing process. Health professionals should consider combining different strategies to reduce pain, particularly for patients who may be reluctant to take medication on a long-term basis.

The next article in this series discusses the importance of clear and accurate documentation for wound management. NT

References
Bit.ly/Wound dint Pain

For more on this topic go online...
- The importance of assessing pain in adults
- Bit.ly/NTpainAssess

TABLE 3. NON-PHARMACOLOGICAL STRATEGIES TO MANAGE WOUND PAIN

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Mode of action</th>
<th>Potential benefits</th>
<th>Cautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aromatherapy</td>
<td>Essential oils produce a sense of relaxation or may stimulate the patient’s memories and the feelings associated with them</td>
<td>Improved sleep patterns, mobility and wellbeing (Howarth, 2002; Walsh and Radcliffe, 2002)</td>
<td>None noted</td>
</tr>
<tr>
<td>Distraction, such as television, videos, music or other activities; chatting</td>
<td>Help patients focus on a pleasant stimulus of their choice instead of pondering on painful/stressful situations</td>
<td>Emotional comfort and a reduction in pain (Williams and Irurita, 2004)</td>
<td>None noted</td>
</tr>
<tr>
<td>Reflexology</td>
<td>Reflexology is based on the concept that all the body’s organs and systems are represented on the hands and feet. Massage and manipulation of specific areas of the hands and feet promotes relaxation and wellbeing</td>
<td>Greater feeling of wellbeing because of being touched; the patient feels cared for; reduced pain in both acute and chronic wounds. Psychologically, being touched is therapeutic for patients (Mackey, 2001; Stephenson et al, 2000)</td>
<td>Caution in fever, phlebitis, pain due to unknown causes, burns, skin infections, fracture sites, epilepsy and pregnancy (Mackey, 2001; Griffiths, 1996)</td>
</tr>
<tr>
<td>Reiki</td>
<td>Life-force energy is directed to the area of injury</td>
<td>Reduced analgesia, increased wellbeing, reduced emotional distress (Wardell and Engberetson, 2001; Alanddydy and Alanddydy, 1999)</td>
<td>None noted</td>
</tr>
</tbody>
</table>