

ARE PRESSURE ULCERS PAINFUL?

There seems to be a myth that pressure ulcers are not painful. This article sets out to dispel this myth as the reality is often that pressure ulcers cause patients considerable pain and discomfort. Quality of life issues, the ways in which patients describe their pressure ulcer pain and the management of this pain are all examined in this article.

Pressure ulcers are described as a 'localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure or pressure in combination with shear' (European Pressure Ulcer Advisory Panel and National Pressure Ulcer Advisory Panel [EPUAP/NPUAP], 2009). A number of contributing factors are also associated with pressure ulcers, such as poor nutrition, high moisture on the skin and some debilitating medical conditions (Coleman et al, 2013).

Pressure ulcers are categorised according to the level of tissue damage. EPUAP's (2014) is the most common classification used in the UK and is the one that is recommended by the new NICE guidance on the Prevention and Management of Pressure Ulcers (2014).

Pressure ulcers are classified as category I when the skin presents with non-blanching erythema — where the skin is red and does not go white (blanch) when pressed. A category II pressure ulcer presents with a partial thickness skin loss (top layer of the skin) or blister, whether the blister is intact or has

burst. Category III pressure ulcers, meanwhile, are ulcers where there is full thickness tissue loss with exposed subcutaneous tissue and there may be slough present. Finally, an ulcer is classified as a category IV when the damage exposes underlying structures such as muscle, tendon or bone.

Pressure ulcers most commonly occur when a person spends most of the time in bed or sitting in a chair/wheelchair. They also usually occur over bony prominences, such as sacrum, buttocks, hips and heels, where there is little soft tissue, such as fat, to provide padding.

Mechanisms of injury

Pressure ulcers develop from three different mechanisms of injury. Some ulcers develop because of friction, for example, the heel continuously rubbing against the bed linen, thus causing blistering. Blisters are the body's mechanism of protection, for example, when the skin rubs against the leather of a new shoe, it forms a blister and if the rubbing continues, the blister will burst. If the rubbing continues further, the damage can extend to deeper tissue.

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The second mechanism of injury is pressure, where the bony part compresses the above tissue against a hard surface, causing tissue death. A good example of this is where patients sit in a chair for long periods of time and ulcers develop over the buttocks.

The third and final method of injury is due to shear. In essence, it is the tearing of the muscle layers from the bone, causing death of the tissue. For example, in patients who have a tendency to slide down the bed, where their bottom (soft tissue) remains stuck to the mattress, but the sacral bones want to slide down the bed. These forces are invisible to the eye and only clinical experience can assist with understanding what is happening to patients, allowing for preventative measures to be implemented.

Poor moving and handling techniques compound the problem, so patients should never be dragged up the bed as this will cause sheer to their sacral area and, if the heel is not supported, it will cause friction to a vulnerable part of the body.

Skin stripping

The skin produces natural protective secretions and oils that maintain a level acid pH balance to assist the skin to remain intact. Exudate from the pressure ulcer has a different pH from the surrounding skin. This is caustic to the periwound and can cause the skin to strip. This may not be visible to the naked eye, but the top layers of the skin effectively burn away.

As over 80% of all pressure ulcers occur to the sacrum (Fletcher et al, 2011) and due to many patients being incontinent, urine and faecal matter will compound the problem and cause further skin stripping. The ammonia produced by the urine on contact with the tissue raises the pH balance of the skin,

making it more permeable (Beldon, 2008). The enzymes contained within faeces act in a similar manner as ammonia, putting the peri-skin at greater risk of damage.

Skin stripping can be very painful, often more painful than the ulcer itself. Good skin care is essential and should include the use of a moisturiser that is designed to hydrate the skin, preserving suppleness and enhancing its barrier functions (Langemo et al, 2011) and a barrier product (Cooper, 2011) to prevent wound exudate, urine or faeces burning the skin.

Quality of life

The impact on developing a pressure ulcer is significant to patients' quality of life, which can result in significant suffering and increases their morbidity. Pressure ulcers can be the cause of local infection, osteomyelitis (infection in the bone), anaemia, sepsis (infection in the whole body), gangrene and even death (Brem et al, 2010). All of these complications can cause pain.

Gorecki et al (2011) systematically reviewed the available literature and concluded that pressure ulcer pain can be debilitating, reducing the patient's ability to participate in physical and social activities, assume comfortable positions, move, walk and undergo rehabilitation.

In a study assessing pain associated with pressure ulcers in community patients in the north of England, 75.6% reported pain (McGinnis et al, 2014), while in the hospitalised patient, Gunes (2008) found that 94.6% of patients who have a category II, III or IV experienced pain.

Conversely, it is important to acknowledge that not all pressure ulcers are painful and, therefore, all patients need to be treated on an individual basis.

Pressure ulcer pain

Woolf et al (2004) explained that there are two types of pain: pain that is a direct result from an inflammatory response (swelling, redness and pain) and pain that is the result of nerve damage or tissue ischaemia (tissue death). In the former, deep ulcers develop when tissue is compressed between the underlying bone and a hard surface in effect causing damage to the tissue. Pain is its direct symptom. In the latter, it is caused by damage or dysfunction in the nervous system and commonly described as sharp, shooting or burning (Gorecki et al, 2006).

Pressure ulcer pain can be intermittent, when the patient is repositioned or mobilised. Ulcer pain can also be constant with background constant pain, which varies in severity, intensity and duration. Pain can also be caused at dressing times or when the wounds are sharply debrided.

Pain associated with pressure ulcers is poorly understood and highlights the complexity of the problem and the difficulty in measuring it. A further challenge is that pain can be influenced by individual factors, such as beliefs, culture, coping mechanisms, knowledge and understanding (Gorecki et al, 2011). Pain cannot be measured directly, but rather is established and determined by the person experiencing it. Pain is what the patient says it is, however, a challenge for patients can be to express the pain they feel; particularly finding the words to express pain experienced so that pain relief can be sought.

How do patients describe pressure ulcers pain?

People with pressure ulcers sometimes describe their experience as "endless pain", which interferes with patients' daily

activities, such as moving around for example, but also their ability to engage and socialise with others. Pain that is not managed well causes sleepless nights, leading to fatigue, anxiety and depression and finally to a decrease in appetite (Gorecki et al, 2009).

Patients describe their pain with a realism that provides clinicians with a clear message — pressure ulcers are painful. “Extreme”, “tremendous” and “very painful” are words that are often used to describe pressure ulcer pain intensity. According to Rastinehad (2006) and Spilsbury et al (2007), people have variously described pressure ulcer pain thus: “it is like digging a screwdriver in”; “Like having an operation without anaesthetic”; “Like sitting in a bath of scalding water”; “Worse than a toothache”; and “It felt like somebody was getting a knife and really digging it in there good and hard”.

Hopkins et al (2006) described how patients feel that their pressure ulcer pain defined who they are, impacting on their identity, self-image and self-worth. Patient described their emotions using words such as “fearful”, “unbearable”, “terribly annoying”, “exhausting”, “punishing”, “cruel”, “miserable” and often the pain was so intense that it would result in tears and screaming (Rastinehad, 2006).

Pressure ulcers can be more painful in the actual wound or the surrounding skin, however, it also radiates elsewhere, spreading around the surround area, travelling up the body from the wound (i.e. up the leg or up the back) or back down.

Most commonly, pain is reported at dressing changes and could take up to five hours to subside (Price et al, 2008). When the pressure ulcer is painful, the dressing technique of a health professional become fundamental to the patient

experience who report problems with dressings’ application, but more commonly with dressings that are over adhesive and rip the skin when removed (Hopkins et al, 2006). Analgesia should be given 30 minutes before dressing change to allow it to take effect.

How do we manage pressure ulcer pain?

Preventing pressure ulcers from occurring in the first place is the best strategy against pain. Using a SSKIN (Skin, Surface, Keep moving, Incontinence and Nutrition bundle) is the basis for effective prevention. Regular, frequent and sustained repositioning regimes with systematic skin assessment is the pillar of preventing pressure ulcers. Furthermore, managing incontinence and addressing nutritional deficits will assist further assist the delivery of preventative care.

If damage does occur, prevention of further damage is essential. Even if pain does not increase with the severity of the damage (Fox, 2002), a category I can be as painful as a category IV. Furthermore, pain at potential pressure ulcers points is an early indicator that a pressure ulcer could develop on that site (McGinnis et al, 2014). Clinicians must be aware that diabetic patients who have neuropathy (i.e. cannot feel their feet), may not feel pain at any point of the treatment, which can cause another set of problems, but lies outside the remit of this article.

Acknowledging that pressure ulcers are painful will provide an awareness of the issue to healthcare professionals. Full assessment of the tissue damage present and of the pain experienced by the patient should be undertaken at the same time, and appropriate pain management strategies initiated

and evaluated (see Kitcatt (2014) for a good list of tips, originally written for acute wounds, but that are transferable to pressure ulcer pain management). If the analgesia administered does not work, then further input should be sought from a pain specialist.

Special attention should be given at dressing times. As pressure ulcers occur in 80% of the time to the sacral area (Fletcher et al, 2011), the dressing can often become dislodged and having to reapply the dressings over and over will compel the problem. Selecting a dressing that stays in place, but that is also kind to the skin will reduce pain at dressing time. There are a number of other strategies that could also be used in wound care, such as distraction techniques. These are essential with paediatric patients, but also very useful with adult patients.

The World Health Organization (2014) recommends a three-step pain ladder, where the first step is offering non-opioids analgesic. If this is insufficient, then the second step is to offer mild opioids and if this does not manage the pain, then the third and final step should be adopted — the use of strong opioids. Entonox (gas and air) could also be used at dressing change, if the wound is especially painful.

Conclusion

Pressure ulcers can cause patients considerable pain and the depth of the damage is not directly proportionate to the pain they can experience. Category I ulcers can be just as painful as category IV. They can be painful at dressing times and/or continually throughout the day and night, causing distress and untold suffering to the patient.

Pressure ulcer pain can be debilitating to the patient as it can restrict their ability to move and, therefore, to rehabilitate

themselves. Some patients can also suffer with anxiety and depression directly attributable to pain caused by pressure damage.

While preventing pressure ulcers from occurring is the most obvious approach, if damage occurs, being aware that ulcers can be painful will open the door to appropriate pain management with adequate systemic analgesia and careful dressing selection to prevent skin stripping and, therefore, avoid increasing pain. To conclude, it is hoped that the myth that pressure ulcers are not painful has been comprehensively dispelled. **WE**

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