HOW VENOUS LEG ULCERS AFFECT QUALITY OF LIFE

Amy Isaac and Christine Watson explore the psychological and social implications of caring for patients with venous leg ulceration

Abstract

The aim of this article is to explore the evidence surrounding the effect of venous leg ulceration (VLU) on patients’ quality of life. There is a large amount of evidence about the treatment of VLU in terms of pathophysiology, healing and symptom control. This has been formulated into clear protocols for community nurses to guide wound management. However, guidance for practice in terms of the wider psychological and social implications of supporting patients living with VLU is limited. This article aims to evaluate the literature on the quality of life of patients with VLU and suggests improvements that will make practice more holistic.

Keywords

leg ulcers, lower limb, patient experience, wound management, quality of life, venous leg ulcers

THE NATIONAL Institute for Health and Care Excellence (NICE) (2015) defines chronic venous leg ulcers as loss of skin below the knee on the leg or foot that take between four and six weeks to heal. Venous leg ulcers are a common and significant problem, accounting for up to 90% of all leg ulcers and affecting about one in 500 people in the UK (NHS Choices 2014). Venous leg ulceration (VLU) makes up about half of community nurses’ workload (Maddox 2012) and an estimated £200 million is spent annually on the care of patients with the condition (Posnett and Franks 2007).

Along with prolonged healing time, leg ulcers cause many unpleasant symptoms, such as intense pain, exudate and malodour (NHS Choices 2014), that can limit patients’ interaction with others and cause emotional distress. However, nurses are usually expected to focus on wound dressing rather than factors that influence quality of life (QoL) (Maddox 2012). Due to pressure on services, community nurses have limited time to spend with patients and tend to adopt a task-focused approach. They may not fully understand the complicated challenges faced by patients with VLU (Morgan and Moffat 2008), whose psychological and social needs are rarely prioritised.

There is agreement in the literature that QoL is affected by each patient’s physical, psychological and social state (World Health Organization 1998, McKevitt et al 2003, Centers for Disease Control and Prevention 2011). Evidence suggests that all these aspects can, individually or collectively, affect patients with VLU (Palfreyman 2008, Walburn et al 2012), indicating that holistic assessments of the wider effect of VLU on the patient’s lifestyle should be considered in the care plan.

Roper et al (2000) recognise that QoL often depends on an ability to independently carry out daily activities. NICE (2015) recommends that nurses promote self-care routines, such as regular leg elevation, use of preventive compression hosiery and regular mobility, to address the underlying cause of ulceration (Circulation Foundation 2013). However, patients with poor mobility, pain, altered body image and poor motivation may be unwilling or unable to sustain these routines over the long term (Van Hecke et al 2011).

Routine QoL assessments can aid the development of individualised patient care plans.
Leg ulcers cause many unpleasant symptoms that can limit patients’ interaction with others and cause emotional distress.
in which the physical, psychological and social implications of living with VLU are considered. However, QoL is difficult to measure and many tools for assessing it lack validity (Royal College of Nursing (RCN) 2006, Hamming and De Vries 2007).

Patients with multiple morbidities have a number of symptoms and so nursing assessments should take into account all of patients’ needs and the possibility they will receive competing advice.

Evidence suggests that VLU affects the whole person socially, psychologically and physically. Mental health has an effect on healing (Persoon et al 2004, Moffatt et al 2009) and lack of healing has a negative effect on mental health (Moffatt et al 2009, Green and Jester 2010). This complex relationship is illustrated by the flow diagram in Figure 1, which predicts outcomes relating to changes in an individual’s condition.

Physical impacts

**Pain** The lives of people with VLU are usually dominated by pain, in some cases so severe that the patients concerned have considered suicide (Palfreyman 2008, Byrne and Kelly 2010, Todd 2011, Maddox 2012, Green et al 2013, Edwards et al 2014).

About three quarters (74%) of people with VLU experience pain, with 56% describing the pain as ‘moderate to severe’ (Edwards et al 2014). VLU-associated pain is linked to several factors, including larger ulcers (Edwards et al 2014), wound cleansing, dressing and compression bandaging (Persoon et al 2004, Palfreyman 2008). Gardner (2013) and Lay-Flurrie (2005) suggest that poor dressing techniques may contribute to pain, so maintaining competencies and skills is essential.

Pain requires comprehensive assessment, but the literature indicates that assessments of pain in people with VLU are often inadequate (Byrne and Kelly 2010, Green and Jester 2010, Maddox 2012, Regmi and Regmi 2012, Gardner 2013). This could be due to a lack of research into the best method of assessing the nature of VLU pain (Van Hecke et al 2010). NICE guidelines suggest only that determining the type and severity of pain is adequate, but no method is recommended (NICE 2015).

Pain has been found to have a significant negative effects on patients’ mobility and ability to live a normal life (Byrne and Kelly 2010, Meagher et al 2012, Green et al 2013, Edwards et al 2014) and can result in social isolation (Walburn et al 2012). The inability to carry out daily living activities can lead to a sense of ‘grieving’ and loss (Byrne and Kelly 2010), and poor mobility and pain have been linked to depression, fatigue and overall reduced quality of life (Edwards et al 2014).

**Lack of mobility** There is also an association between the prevalence of VLU pain and the use of mobility aids for illnesses, suggesting that immobility may be partly due to factors other than VLU (Edwards et al 2014). Mobility may also be affected by unsuitable footwear and leaking ulcers (Persoon et al 2004).

Existing or ulcer-related poor mobility may affect patients’ abilities to manage their own conditions with minimal dependence on health professionals. The application of compression hosiery, for example, is important in VLU management, but requires a degree of flexibility and strength, (Finlayson et al 2010, Brown 2013). Similarly, leg elevation encourages venous return, and thereby reduces pain and leg swelling (NICE 2015).

Physical activities can benefit VLU healing times and social interactions, but may be hampered by pain (Finlayson et al 2009, Van Hecke et al 2011, Meagher et al 2012). Patients who experience prolonged chronic ulceration often doubt the effectiveness of physical activity (Van Hecke et al 2010), while those with limited mobility due to a fear of falling may avoid it.

If nurses identify poor compliance with treatments, they can explore such fears with the patients concerned. Strategies such as seated leg exercises offer an alternative; adherence to such exercises is higher as they are easier to incorporate into daily life (Van Hecke et al 2011).

A link has been established between poor mobility, pain, fatigue, depression and overall diminished QoL (Maddox 2012, Edwards et al 2014), with Walburn et al (2012) claiming that social isolation may follow.

Psychological and social impacts


Brown (2010), Gardner (2013) and Upton et al (2014) suggest that, with the right approach, nurses can improve how patients feel about themselves. Patients often recognise those nurses who have advanced skills and knowledge, which inspires confidence in their treatment (Brown 2010). Patients also find regular feedback and positive reinforcement to be supportive (Green et al 2013).

Frustration and pessimism are not uncommon among nurses treating VLU, however, often due to non-healing and suspected patient non-compliance (Cullen and Phillips 2009, Brown 2010).
Nurses in these situations must not underestimate the influence their attitudes have on patients. In a case study described by Moffat et al (2009), a patient said that a nurse had become 'cross' because of non-compliance. This had a negative effect on the nurse-patient relationship, compounding non-compliance.

**Depression** Low mood and depression are common in people with VLU (Byrne and Kelly 2010, Green et al 2013, Edwards et al 2014). The evidence suggests a link between depression and an inability to comply with treatment and self-care guidelines (Finlayson et al 2009, 2010) while mood improvement often goes hand in hand with healing, which in turn depends on compliance with treatment (Palfreyman 2008).

**Negative body image** Patients’ difficulties in following self-care regimens can be reinforced by negative body image due to unsightly bandages (Finlayson et al 2010, Green et al 2013). Body image and clothing choices are important to patients with VLU, especially women (Brown 2010, Finlayson et al 2010), and their inability to dress correctly for specific events may limit their social interactions (Byrne and Kelly 2010, Green et al 2013). Such patients often have limited choices about footwear and may want to conceal their bandages, making dressing for special occasions difficult.

Leaking bandages can also affect body image. The unpredictable nature of exudate and malodour can cause distress, embarrassment, shame and anxiety (Byrne and Kelly 2010, Walburn et al 2012, Green et al 2013, Upton et al 2014). Jones et al (2008) identify a relationship between clinical depression, uncontrolled exudate, malodour and poor social life. Exudate and malodour can make people with VLU afraid of other people's reactions and lead them to avoid social situations, including family events (Byrne and Kelly 2010).

**Fear of harm or damage** Anxiety about damage or harm to affected areas is also common (Brown 2010, Finlayson et al 2010, Van Hecke et al 2011, Green et al 2013, Upton et al 2014).

Some individuals keep their legs padded to prevent trauma and tend to avoid events and environments, such as children’s parties and shopping in crowded places, where they may damage them (Brown 2010, Finlayson et al 2010, Green et al 2013, Upton et al 2014).

---

**Figure 1** Relationships between physical, social and psychological wellbeing and behaviour in people with venous leg ulcers

<table>
<thead>
<tr>
<th>1. Physical manifestation</th>
<th>Social experience</th>
<th>Psychological detriment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased pain and reduced mobility</td>
<td>Socially restricted by pain and mobility</td>
<td>Poor psychological wellbeing as a result</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Social experience</th>
<th>Psychological detriment</th>
<th>Physical manifestation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exudate and malodour deterring social contact</td>
<td>Lowered mood, embarrassment</td>
<td>Failure to comply with treatment results in deteriorating physical state</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Psychological detriment</th>
<th>Social experience</th>
<th>Physical manifestation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altered body image due to compression bandaging or hosiery</td>
<td>Difficulties dressing for occasions or lowered social interaction due to aesthetic appearance</td>
<td>Failure to wear compression, exacerbating physical symptoms</td>
</tr>
</tbody>
</table>
Many people reportedly continually check their legs throughout the day, fearing deterioration and further damage. High levels of such anxiety are associated with higher rates of ulcer recurrence, and people with multiple ulcers tend to become more anxious the more their ulcers recur (Brown 2010, Finlayson et al 2010).

Isolation Social restrictions can extend to personal relationships. Green et al (2013) found that some people with VLU have difficulties sustaining intimate relationships with others and are concerned about dating. Evidence suggests that such people tend to rely on their families to care for them, which can cause stress (Upton et al 2014).

Dependence Just as there is a link between greater social support, self-care and physical activity (Finlayson et al 2009), there is a link between poor personal relationships and unsuccessful treatments and self-care compliance (Moffatt et al 2009, Brown 2010, Finlayson et al 2011, Van Hecke et al 2011, Maddox 2012, Green et al 2013).

People with VLU may find that self-care regimens, such as leg elevation and mobilisation, require assistance and, if this is forthcoming, they are more likely to achieve their goals. However, many people with VLU find self-care regimens socially limiting because of the time they require (Van Hecke et al 2011). Nurses can unintentionally impose social constraints by requiring patients to wait for them to complete dressing changes or attend leg ulcer clinics. These patients may become dependent on nurses because they have not practised self-care (Van Hecke et al 2011, Green et al 2013).

It has been suggested that dependence on nurses may extend to social interactions (Cullen and Phillips 2009, Green et al 2013), leading to deliberate interference with treatments to delay healing and prolong contact with nurses (Brown 2005). If so, nursing care may in some cases lead to an unhealthy dependence in socially isolated patients. Support groups have been formed to increase motivation and compliance with self-care (Van Hecke et al 2008, Green and Jester 2010, Van Hecke et al 2011, Maddox 2012), although they are yet to be introduced nationally.

People with VLU may experience financial pressures, such as the need to provide for or support families, although the literature suggests that few patients are in regular paid employment (Finlayson et al 2011, Edwards et al 2014). Employment may be limited by pain and mobility issues, and people with VLU may choose sedentary jobs, such as taxi or truck driving. These roles may be preferred by patients because they would not be expected to care for themselves (Finlayson et al 2010). If this is the case, nurses need to make sure that patients understand their role in treatment planning and ensure that they are prepared for their role.

References

Age UK (2012) Internet use amongst older people. tinyurl.com/po69t6h (last accessed: March 11 2014.)


Circulation Foundation (2013) Leg Ulcers. tinyurl.com/3teuqmg (last accessed: March 3 2016.)


Lay-Flurrie K (2005) Assessment and good technique are key to effective compression therapy. Professional Nurse. 20, 7, 31-34.


impose physical restraints that delay healing (Briggs and Fleming 2007).

For some people, VLU can become the ‘norm’ or part of their identity as they attempt to negotiate a social life (Cullen and Phillips 2009). Other studies found that people with VLU adapt to the condition, and can live normal lives (Brown 2010, Green et al 2013). For some patients, however, the compounding effects of pain and immobility are too severe, and their QoL is much reduced (Bryne and Kelly 2010).

Recommendations
Nursing philosophy

- Nurses should refocus on VLU as a chronic condition and support lifestyle adaptations rather than wound healing.
- They should treat the person, not the leg ulcer, to improve outcomes.
- They should try to adopt positive attitudes towards VLU care using motivational techniques.

Patient education

- Nurses should ensure that patients are well informed about their condition so that they can become partners in their own care. To this end, nurses can use tools, such as Chase et al’s (2000) Venous Leg Ulcer Knowledge Test or Shannon et al’s (2011) succinct Ask-Tell-Ask tool.

Social support

- Social services and third-sector organisations should help provide community initiatives and group support for people with VULs to expand their social support networks and prevent them from becoming over dependent on informal carers and nurses.

- Patients should be referred to voluntary services, such as those listed in Box 1.

Improved assessments

- Holistic assessment should address patients’ environment, social, physical and psychological needs, and identify any barriers to behaviour change. Nurses can use or adapt existing tools, such as the RCN’s (2006) Nursing Management of Patients with Venous Leg Ulcers guideline.
- Patients and carers can be encouraged to keep diaries to record symptoms and pain levels between visits. These diaries can be useful in nurse-led assessments.

Research

- Nurse researchers should identify the most appropriate assessment tools for VLU pain and QoL. They should be appropriate to the patients and simple to use.
- Nurse researchers should also evaluate whether the internet has a role in providing support for socially isolated people with VLU. According to Age UK (2012), people aged 65 and over who are online are three times less likely to report being lonely than who are not.

Conclusion

Evidence suggests that VLU affects QoL. The model of care adopted by community nurses fails to meet these patients’ complex needs, which in turn affects their care outcomes and represents a significant financial burden on the NHS. There is therefore a need to review established models of care and develop national guidelines that incorporate holistic assessment and care planning based on sound research.


