Nonhealing venous leg ulcers in primary care: Clinical significance of training, knowledge, treatment, and healing

A review of numerous venous leg ulcer (VLU) clinical trials involving compression therapy revealed that, in all cases, a significant proportion of wounds – approximately 20% after 2 years – do not heal with conservative treatment (Rippon et al, 2007). While some of these treatment failures can be attributed to factors such as noncompliance and infection, "nonresponders" will undergo what is described as "standard treatment". As many of these studies were hospital-based, and conducted according to strict protocols, they may not reflect the 'real-world' situation.

What then do we know of healing and nonhealing of VLUs in primary care? A useful insight has been published showing that the majority of ulcers (upwards of 90%) were unhealed at 6 months (Guest et al, 2012). Such an alarmingly low reported healing rate (6–9%) demands explanation, and remedy. Are the data reliable? What is going wrong?

The Guest et al (2012) data, derived from The Health Improvement Network (THIN) database, are based on large patient numbers, and are representative (Blak et al, 2011). Separately, audit data acquired from different primary care settings show healing rates for VLUs of between 12% and 73% in 12 weeks (White et al, 2012), the latter figure being attributable to a specialist leg ulcer service.

Furthermore, data acquired from an e-survey (White et al, 2012) revealed that too few clinics gather and record accurate healing time, or infection rate, data. Infection rates ranged from 0% to 80%, with this large range strongly suggesting that knowledge in this area is weak and/or the criteria used to diagnose are inconsistent. This scenario will undoubtedly lead to wide variation in treatment with the probable consequence being under- or overuse of antimicrobials. The percentage of patients receiving compression (40–100%) is also of concern, given that best practice guidelines currently exist (O'Meara et al, 2009; SIGN, 2010).

There is every indication that VLUs in primary care are not being managed optimally, which is proving expensive, nor is it in the best interests of patients and clinicians alike. The following questions, addressed by two acknowledged experts in the field of VLU management, are intended to expose the reasons underpinning the current situation and, to suggest remedies. If, as the case appears to be, VLU healing rates are below 10% in primary care, complacency is simply not an option.

Richard White

Should VLUs be classified as an "acute" condition, as this will impact on outcome expectations?

AB: In my opinion, no. VLUs should be redefined as a "chronic" condition, since they share a similar disease trajectory with conditions such as multiple sclerosis or rheumatoid arthritis, where patients experience alternating periods of remission and acute exacerbation of symptoms. The high recurrence rate of VLUs published in the literature indicates that this is the case for many patients (Kapp and Sayers, 2008; Finlayson et al, 2009; 2011). Treatment of an open ulcer is merely palliative since, in the absence of surgery, the underlying cause of the ulceration will persist.

In terms of outcome expectations, treating patients with the objectives of an acute model – that is, focusing on complete healing of the ulcer – may result in feelings of despondency for the patient if the ulcer fails to heal or recurs frequently.

In these cases, alternative patient-focused outcome objectives, such as pain control, exudate reduction, and odour management, will enhance quality of life for patients. The challenge, however, is how to demonstrate these outcomes.

NW: The key issue here is education. Classification has little impact if leg wounds are not being identified as "leg ulcers" and, therefore, assessed and treated as such. There is a need to raise awareness of leg ulcers and the excepted outcomes for them. Classification of VLUs as an "acute" condition may raise expectations, but, as seen in the Any Qualified Provider

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(AQP) document (Department of Health [DH], 2011), VLUs have been identified as either "simple" or "chronic" with different outcomes. This sheds light on the fact that not all VLUs are acute and highlights the need to focus on education when identifying leg ulcers and expected outcomes. If underlying venous disease is left untreated, VLUs are likely to recur, therefore, they could be better defined as a long-term condition, with acute episodes.

The majority of VLUs are managed in primary care. Can we be confident that "best practice" is being routinely exercised in that setting?

AB: I believe that VLUs are best managed in primary care; with treatment being administered in the patient's home by community nurses who possess the skills to provide care.

Community nurses tend to be "Jacks of all trades", with diverse and often challenging caseloads. While many have considerable experience in managing VLUs, it must be remembered that they are not specialists. Research focussing on nonhealing rates in leg ulcer clinics run by specialist nurses only demonstrate the healing rates that can be achieved when patients receive consistent care by a specialist team (O'Meara et al, 2009).

Patients in the community may be treated by many different nurses with varying levels of bandaging expertise, and this may have a negative impact on outcomes. Increased caseloads has meant that corners are sometimes cut. It is my experience that many patients do not have their legs routinely washed between bandaging, which is a pity as this often provides great comfort for the patient. Furthermore, patients have reported having received dressing changes three times a week for a period of weeks, or even months, before a full assessment was performed to determine the cause of their leg ulcer. Apart from potentially delaying healing, failure to undertake a full assessment of the wound is likely to result in improper care and an increase in workload.

NW: Where clinicians possessing the requisite skills routinely assess and care for patients with leg ulcers, then I would say yes, best practice *is* exercised. My concerns arise where clinicians have not had up-to-date training and no continuity in assessing and treating patients with leg ulcers. It is the same as any other therapy area when clinicians routinely care for patients with a particular condition, and keep themselves informed about current best practice. But when clinician knowledge is not up-to-date, best practice slips. Another way to assess an individual's competencies is also informed by the completion of regular (e.g. annual) competency assessments, either self-assessment, or more formal assessment.

Do community nurses generally have adequate training, time, and access to products to manage VLUs, especially in the patient's home setting?

AB: Much of this question has been addressed in my previous answer, however, I feel the issue of training needs to be expanded upon. Many NHS community trusts have introduced competency-based leg ulcer training, which provides an indication of a nurse's skill in managing leg ulceration. However, this is only indicative of their skill at the time of the assessment.

Studies have found that nurses' bandage application skills following training begin to deteriorate rapidly and regress to pre-training levels within 10 weeks (Feben, 2003). This suggests these competencies must be assessed every 2–3 months, which is simply not feasible. As a result, community nurses may lack confidence in their leg ulcer management skills and, from experience, they then tend to apply reduced compression "just in case" to patients who would benefit from full compression. This will have a negative impact on healing rates.

In terms of products, most NHS trusts have wound care formularies that provide guidance on the use of dressings. Dressings included in formularies are generally supported by an evidence base for their efficacy and should be viewed as an aid to decision-making. The days of a community nurse choosing a particular dressing, because "I like it" are over due to financial constraints and the need to demonstrate evidence-based practice. As a rule, community nurses have access to a wide variety of products, however, the focus must be on compression as the effective treatment, and not the dressing.

NW: No. I think time is the main issue here. Training is normally accessible and available, but community nurses find it challenging to be released for training. Time to deliver best practice is also difficult, whether that is in the patient's home or a GP practice, taking into consideration varying accessibility and availability of appropriate equipment required. With increased numbers of patients (often with comorbidities) being cared for at home, community services are having to operate differently to ensure care is delivered in a safe and timely way.

Are clinical outcomes being recorded and reported, such that a clear picture of what is being achieved, and at what cost, can be measured?

AB: Most NHS community trusts use SystmOne™ (TPP) to record all the nursing activities relating to VLU management. This information is read coded and payments are received

according to the data recorded. This appears to work well within specialist clinics, but can generate an unclear picture when community nursing data are analysed, particularly if care is shared between community nursing teams and specialist ulcer clinics.

With the introduction of the Payments by Results (DOH, 2012) and AQP (DOH, 2011) initiatives, nurses who provide leg ulcer services will need to up their game in recording accurate data. The key performance indicators for payment are set out in the venous leg ulcer and wound healing service specification (Supply2Health, 2012) and require 70% of ulcers to be healed within 18 weeks (simple ulcers) or 24 weeks (complex ulcers). These may be considered optimistic healing rates, particularly in light of Guest et al's (2012) findings.

Furthermore, the AQP tariff will only reimburse for 1-hour follow-up sessions posthealing for the provision of compression hosiery. In my opinion, this will result in a revolving door service for leg ulcer patients. As mentioned previously, there must be provision for recording clinical outcomes other than a healed ulcer for those patients whose underlying disease processes will mean that their ulcers are unlikely to ever heal.

NW: I think outcomes are recorded locally in a lot of places, but not often shared nationally. This is an area that must be addressed and requires standardisation, and all areas would benefit from a uniformity of standards. An example of guidelines that could be implemented nationally are the Nursing Standards (Whayman, 2012) for leg ulcer services that have been developed by the Leg Ulcer Forum. VLU healing rates are an example of outcomes that can be measured on a local level, but there are still no clear national healing rates available.

Does the NHS afford VLU care in the community sufficient resources to justify the incidence and prevalence?

AB: Probably not. Despite the cost of providing leg ulcer care to the NHS, tissue viability services still tend not to be regarded as a priority. Unfortunately, there are so many conditions competing for funding within a framework of finite resources, and funding tends to be allocated to high-profile areas, for example, the surge in available resources for the prevention of pressure ulcer damage, which came about as a result of media coverage of poor care.

Treating chronic venous insufficiency surgically, as many other countries routinely do, would reduce the overall NHS spend on treating chronic, open ulceration and certainly improve patients' quality of life. What we need is "patient power" to highlight the suffering that VLU causes; preferably a celebrity with a leg ulcer to highlight this debilitating condition!

NW: Data collection on national VLU prevalence is not up-to-date so we do not know the extent of the resources needed. However, I would say that there are not sufficient resources at present.

A national campaign needs to be instigated to raise awareness and set standards and measures, so that outcomes can be assessed and costs calculated, and services can justify the resources needed to manage and prevent VLUs. Systems need to be implemented to measure VLU incidence and prevalence, as well as setting national standards to achieve equity in leg ulcer services, as opposed to the current postcode lottery, thus improving clinical outcomes for patients. WUK

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