Early intervention for patients with chronic venous insufficiency

Abstract

The recommendation by the Venous Forum for rapid referral for patients with venous insufficiency would encourage a proactive approach to preventing and managing chronic venous ulceration. This article looks at the consequences of implementing a two-week referral time.

KEY WORDS

- Venous insufficiency
- CEAP
- Venous Forum
- Referral.

IRENE ANDERSON

Principal Lecturer, Tissue Viability and Reader in Learning and Teaching in Healthcare Practice, University of Hertfordshire

In December 2010, the Venous Forum of the Royal Society of Medicine (RSM) published recommendations for the referral of people with venous insufficiency to vascular surgeons within a two-week time frame (Berridge et al, 2010). This article explains the classification system used for referrals and discusses some of the potential benefits and challenges of the recommendations.

BACKGROUND

In 1994, the CEAP classification system for venous insufficiency was devised by a large group of surgeons and physicians at an American Venous Forum meeting in Hawaii and was widely adopted in vascular services. The system was acknowledged to be flawed due to its complexity but was a useful means of identifying the clinical state of a limb (Bergan, 1999). The classification system was updated in 2004 (Eklöf et al, 2004). CEAP stands for:

- Clinical signs
- Aetiology (etiology in the US)
- Anatomic distribution
- Pathophysiological dysfunction.

In the new referral recommendations, published by the Venous Forum of the RSM (Berridge et al, 2010), the 'C' category includes criteria for referral for assessment and treatment by a vascular surgeon. This section is divided into seven categories that range from C0 to C6 (*Table 1*). The recommendations aim to ensure that all patients within categories C4 to C6 are assessed for possible intervention by a vascular surgeon. Some people in categories C1 to C3 may also benefit from a vascular referral, especially those with persistent oedema and venous symptoms that impact on health-related quality of life (HRQOL). Categories C4 to C6 are classed as 'complicated disease' and it is this group of patients that are most at risk of venous ulceration (Rabe and Pannier, 2010).

A rapid referral process constitutes a proactive approach to the prevention and management of chronic venous ulceration and, if implemented, could radically change the way patients are managed. The recommendations have been presented as a means of reducing the impact on patients' quality of life in relation to health and, ultimately, reducing costs to health services (Berridge et al, 2010; Rabe and Pannier, 2010). The consensus team responsible for the guidelines point to the inconsistency caused by the rationing of venous services and geographical variations at a time when non-surgical techniques have been increasing. They call for equitable access to expert services for those with chronic venous insufficiency who are suitable for venous procedures and are desirous of treatment.

RECOMMENDATIONS

The management of venous leg ulceration centres on the following:

- Exercise
- Leg elevation
- Weight management
- Skin care
- Compression therapy.

These aspects need to continue to be managed post healing to reduce the risk

of ulcer recurrence, although this remains significantly high, even with intervention (Gillespie, 2010). Therefore, interventions that deal with the underlying disease may present significant benefits for patients. The guidelines refer specifically to treatments such as:

- Ablation, either with laser or radiofrequency
- Foam sclerotherapy using ultrasound
- Surgery.

These treatments are all useful for superficial venous reflux. Even if some deep venous disease exists, patients may still benefit from the active treatment of the underlying condition (Vowden and Vowden, 2007). For some, the use of compression therapy will continue to be the best option but Vowden and Vowden indicate that there is a need for ongoing research to establish which interventions best match specific clinical circumstances. The National Institute for Health and Clinical Excellence (NICE) referral advice (2001) suggests that people should have a vascular referral when they have the following:

- Bleeding from a varicosity
- An active or healed ulcer
- Recurrent superficial thrombophlebitis
- 'Troublesome' symptoms, such as pain or restless legs.

The NICE referral guidance has been superseded by a referral database but varicose veins do not appear on it. There is, however, a guideline for varicose vein management under development although ulceration management will not be part of the remit (NICE, 2011).

Most patients who fall under categories C1 to C3 in the RSM guidance will be managed with lifestyle advice and compression hosiery. However, some do not respond to conservative treatment (including hosiery). For others, their symptoms are clearly related to venous insufficiency and are problematic to the patient, including unresolving oedema (*Table 1*). This group of patients may benefit from a referral. There is no clear evidence that this patient group will go on to develop leg ulcers but those with leg ulcers do report no response to conservative treatment, indicating that, for some, a more proactive approach may be needed.

A key feature of the new recommendations is for referrals in categories C4 to C6. It is recommended that all C4 and C5 patients should be referred to a vascular consultant

Table 1
(Berridge et al, 2010)

Classification (C category)	*Description*	*Recommendations*
C_0	*No visible or palbable signs of venous disease*	*No intervention*
C_1	*Telangiectasias or reticular veins*	*Lifestyle advice and conservative management, except in the case of impaired HRQOL, 'troublesome symptoms,' no response to treatment, clear signs of chronic venous insufficiency, non resolving oedema*
C_2	*Varicose veins (>3mm)*	*As above*
C_3	*Oedema*	*As above*
C_4	*Changes in skin and subcutaneous tissue; pigmentation, eczema, lipodermatosclerosis or atrophie blanch*	*Referral on the grounds that there is a significant risk of chronic venous ulceration*
C_5	*Healed venous ulcer*	*As above*
C_6	*Active venous ulcer*	*Urgent referral within two weeks*

Note: Urgent referrals also apply when there is bleeding varicosities or superficial thrombophlebitis.

References

Bergan JJ (1999) How should venous disease be classified? In Ruckley CV, Fowkes FGR, Bradbury AW (eds). *Venous Disease* Springer, London: 73–79

Berridge D, Bradbury AW, Davies AH, et al (2010) Recommendations for the referral and treatment of patients with lower limb chronic venous insufficiency (including varicose veins). *Venous Forum of the Royal Society of Medicine* Available at: www.rsm.ac.uk/academ/forvenou.php (accessed 14 February, 2012)

Eklöf B, Rutherford RB, Bergan JJ, et al (2004) Revision of the CEAP classification for chronic venous disorders: Consensus statement. *J Vasc Surg* 30(2): 103–06

Gillespie DL (2010) Venous ulcer diagnosis, treatment, and prevention of recurrences. *J Vasc Surg* 52(5 Suppl): 8S–14S

Knight S (2008) Could leg ulcer service provision in the community be improved? *Br J Community Nurs* 13(6): S39–40

KEY POINTS

- A rapid referral process constitutes a proactive approach to the prevention and management of chronic venous ulceration.
- Early intervention might reduce the complications that come with chronicity and prevent or delay recurrence.
- Many interventions for chronic venous insufficiency can be carried out in outpatient settings rather than in an operating theatre.

for a clinical and colour duplex assessment complemented by other diagnostics as appropriate. A further important recommendation is that all patients with an active venous ulcer (C6) should be referred urgently to a vascular consultant if there is failure to heal within a two-week period and the patient should then be seen within two weeks of the referral (Berridge et al, 2010). This is potentially controversial since, currently, most patients with venous ulcers are managed in community services or leg ulcer clinics and do not see a vascular consultant during or after healing. The recommended change would result in much higher referral rates.

In contrast, national leg ulcer guidelines (SIGN, 2010) define a venous leg ulcer as an open lesion of at least four weeks' duration (with the presence of venous disease). However, definitions vary and, if there are clear signs of chronic venous insufficiency, it is a source of frustration that some practitioners will wait four to six weeks before intervening with leg ulcer-specific assessment and interventions.

BENEFITS

A two-week referral time for vascular intervention opens up exciting possibilities for patient care. Ulcers which have been open for a long time inevitably take longer to heal (RCN, 2006) and are more likely to become complicated by other factors, such as:

- Pain
- Prolonged inflammation
- Prolonged infection.

Early intervention may reduce the complications that come with chronicity and offer the patient the best chance of healing and preventing or delaying recurrence. Clear guidelines will also reduce the risk of patients being kept in suboptimal treatment for long periods of time because their condition is being managed by inexperienced personnel (Knight, 2008).

CHALLENGES

There may be challenges in putting this guidance into practice. Key to the process will be the GP or practice nurse recognising the problem and making a referral. Community services, especially in leg ulcer clinics, would need to have different working practices to ensure patients are assessed and referred in a timely manner. However, in some services, vascular consultants run outreach services to bring primary and secondary care closer together, resulting in a more streamlined service for patients.

The use of portable duplex scanning devices and immediate access to the consultant or vascular specialist nurse could dramatically change current models of working. There are costs involved in referrals and diagnostics which will have to be met, but the Venous Forum group assert that their recommendations will lead to more clinically-focused patient care and cost-effective use of resources.

Increased referrals and interventions will need to be subjected to scrutiny and evaluation to establish economic and quality of life benefits. Any increase in waiting list times would need to be managed, especially so that the two-week target can be met. However, this presents exciting opportunities for practice and for people living with chronic venous insufficiency and ulceration. Even enhanced access to duplex scanning would ensure a more accurate diagnosis of the site and the extent of chronic venous disease, which would aid the targeting of resources in primary and secondary care.

In a recent editorial (Zimmet, 2011), the recommendations were welcomed as an initiative that would use NHS resources effectively. The editorial was based on a wealth of published evidence and expert opinion. Zimmet points out that many interventions for chronic venous insufficiency can be carried out in outpatient settings or other clinic settings rather than in a hospital operating theatre.

CONCLUSION

At the moment, and according to national leg ulcer guidelines (RCN, 2006; SIGN, 2010), urgent referral is confined to severe arterial disease. Applying this to venous insufficiency may meet some resistance but venous disease management has everything to gain from early intervention if it can be shown to make a measurable difference to patients and leg ulcer services.

Early intervention could help avoid progression to tissue changes and deteriorating skin integrity, possibly leading to venous ulceration (Gillespie, 2010). It will be interesting to evaluate the uptake and impact of these recommendations on resources and patient experience. WUK

References

NICE (2001) *Referral Advice: A guide to appropriate referral from general to specialist services*. NICE, London

NICE (2011) *Varicose Veins in the Leg*. Available online at: http://guidance.nice.org.uk/CG/Wave24/11 (Accessed 16 February, 2012)

Rabe E, Pannier F (2010) Societal costs of chronic venous disease in CEAP C4, C5, C6 disease. *Phlebology* 25: 64–67

RCN (2006) *The Nursing Management of Patients with Venous Leg Ulcers*. RCN, London

SIGN Guideline 120 (2010) *Management of Chronic Venous Leg Ulcers: a national clinical guideline*. Scottish Intercollegiate Guideline Network, Edinburgh

Vowden P, Vowden K (2007) Surgery and Sclerotherapy in the Management of Venous Ulcers. In: Morison MJ, Moffatt CJ, Franks PJ (eds). *Leg Ulcers*. Mosby, London: 199–211

Zimmet S (2011) Recommendations for the referral and treatment of patients with lower limb chronic venous insufficiency. Available at: http://phleb.rsmjournals.com/content/26/3/89.full (Accessed 16 February, 2012)