RCN guideline on the management of leg ulcers

The treatment of uncomplicated leg ulcers has not always been carried out effectively. In this article, the authors introduce an evidence-based clinical guideline for the treatment of uncomplicated leg ulcers and highlight some of the key recommendations. This is to be launched at Nursing Standard’s conference on evidence-based nursing this week (See page 56).

Date of acceptance: October 30 1998.

In 1996, the NHS Executive (NHSE) commissioned the RCN to develop a clinical guideline on the management of uncomplicated venous leg ulcers. The guideline was undertaken in collaboration with the Centre for Evidence-based Nursing at the University of York and built on previous work on an NHSE-funded guideline. Updated sections of an earlier systematic review (Cullum 1994), the Effective Health Care Bulletin (CRD 1997) on compression therapy for venous ulcers, a systematic review in progress by the Centre for Evidence-based Nursing, and the NHS Centre for Reviews and Dissemination on wound cleansing, debridement, and dressings, along with expert opinion, formed the evidence base for the resulting recommendations. This article introduces the guideline and some of its key recommendations.

RATIONALE FOR THE CLINICAL GUIDELINE

Leg ulcers are predominantly managed in the community and the aim of the guideline is to direct primary healthcare practitioners to the most effective method of assessment and treatment of venous leg ulcers, and to discourage practices which do not have convincing or sufficient evidence of effectiveness. Approximately 1.5 to 3 per 1,000 of the population have active leg ulcers (Callam et al 1988, Cornwall et al 1986), resulting in reduced quality of life (Hamer et al 1994).

It is known beyond reasonable doubt that venous leg ulcers are most effectively treated by compression bandaging (CRD 1997).

The guideline fulfils the essential criteria for topic choice as described by the NHSE (1996) as:

- High morbidity, mortality and disability (which can be reduced by treatment).
- Effective treatment not used routinely in practice.
- High time/resource consumption.
- Multiprofessional delivery of care.

Wide variation in practice

Estimates of leg ulcer healing rates vary between 25 and 84 per cent within 12 weeks. These rates, and the chronicity of leg ulcers, are thought to be influenced by variations in care and management (Elliot et al 1996, Roe et al 1993), in particular, the use of compression bandaging and assessment practices (Elliot et al 1996, Stevens et al 1997).

Effective treatment not widely used in practice

There is evidence that the application of high compression therapy can significantly increase the healing rates of leg ulcers (CRD 1997), and that use of compression after healing reduces the rate of ulcer recurrence (CRD 1997).

High consumption of time and resources

The management of leg ulcers is a costly activity; the estimated cost in the UK per year for each unhealed ulcer is £1,067, with the largest costs due to district nurse time. The widespread adoption of techniques of proven efficacy, as specified in the guideline, has the potential to improve healing rates and reduce material costs.

Multiprofessional delivery of care

Approximately 85 per cent of patients with leg ulcers are treated in the community by district nurses and/or GPs (Cullum 1994). Practice nurses, surgeons, dermatologists, therapists, pharmacists and leg ulcer clinics, can also be involved to some degree. Guidelines can be helpful by providing a framework for those services that cut across primary, secondary and community care, as well as different professional areas.

By providing a framework, guidelines help to standardise care, thereby ensuring that it is consistent and effective, and not governed by varied and conflicting opinions regarding leg ulcer management.

DEVELOPMENT OF THE GUIDELINE

Method

The method by which the leg ulcer guideline was developed was based on the methodology of other guideline developers.
EVIDENCE-BASED NURSING


Grading of evidence The strength of the research evidence supporting each guideline was graded I, II or III (adapted from Waddell et al 1996):

- Grade I – generally consistent finding in a majority of multiple acceptable studies.
- Grade II – either based on a single acceptable study, or a weak or inconsistent finding in multiple acceptable studies.
- Grade III – limited scientific evidence which does not meet all the criteria of acceptable studies or absence of directly applicable studies of good quality. This includes published and unpublished expert opinion.

Patient input The inclusion of patient-based evidence as part of the evidence base of the guideline recommendations was achieved by having patient representation on the steering group, and by covering research on those issues of particular interest to patients in the literature review.

Peer and expert review Successive iterations of the guidelines have been extensively reviewed by an expert panel comprising many members of the original guideline consensus group and tissue viability nurse specialists.

Examples of some of the guideline recommendations, and the associated evidence, are presented in Table 1.

NATIONAL LEG ULCER SENTINEL AUDIT PROJECT

Evidence-based audit criteria are being developed, based on this clinical guideline, that include elements of the structure, process and outcome of care. This work is being undertaken as part of a national sentinel audit project funded by the NHSE, in partnership with the RCN, Centre for Evidence-based Nursing, Eli Lilly National Clinical Audit Centre, the Royal College of Psychiatrists (RCP), the Royal College of General Practitioners (RCGP) and the Tissue Viability Society.

CONCLUSION

The RCN clinical guideline aims to provide: ‘...systematically developed statements to assist practitioner and patient decision about appropriate health care for specific clinical circumstances’ (Field and Lohr 1992) for leg ulcer management. The clinical guideline for leg ulcer management is based on research evidence, augmented by professional and patient opinion, and adheres to the ‘gold standard’ method for guideline development. The guideline has been exten-

<table>
<thead>
<tr>
<th>GUIDELINE STATEMENT</th>
<th>DESCRIPTION OF THE EVIDENCE</th>
<th>STRENGTH OF THE EVIDENCE</th>
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<tbody>
<tr>
<td>Assessment and clinical investigations should be undertaken by a healthcare practitioner trained in leg ulcer management</td>
<td>No studies could be found which assess and compare the reliability and accuracy of nursing assessment of patients with leg ulcers</td>
<td>Level III</td>
</tr>
<tr>
<td>Patients with uncomplicated venous leg ulcers should be treated with graduated multilayer high compression systems, with adequate padding, capable of sustaining compression for at least a week</td>
<td>A number of randomised controlled trials (RCTs) have compared leg ulcer healing in people with and without compression and found that compression heals more ulcers. The research has been summarised in a systematic review which concluded that multilayer high compression is more effective than low compression or a single layer bandage</td>
<td>Level I</td>
</tr>
<tr>
<td>Health professionals should regularly monitor whether patients experience pain associated with venous leg ulcers and formulate a management plan which may consist of compression therapy, exercise, leg elevation and analgesia</td>
<td>Patients with venous ulcers can experience considerable pain and this should be assessed. No research could be identified that examined the use of a specific method of pain assessment or relief</td>
<td>Level II</td>
</tr>
</tbody>
</table>
sively peer-reviewed and is applicable to all settings where leg ulcer care is managed.

The guideline is available in three formats:

- A brief version for quick reference.
- The full clinical practice guideline, describing the evidence on which the recommendations are based.
- The guideline report which is the full technical report including the methodology used for their development.

FURTHER INFORMATION

For copies of the Leg Ulcer Clinical Practice Guideline, please send a cheque (made payable to RCN Publishing Company) for £7 (£5.50 + £1.50 post and package) to:

Nursing Standard Publications
PO Box 33
Newport
Gwent NP1 4YN. Please mark your envelope Leg Ulcer Guideline – Clinical Practice Guideline.

Order forms for the technical report can be obtained from:
Leg Ulcer Technical Report
Marketing Department
RCN Publishing Company
17-19 Peterborough Road
Harrow
HA1 2AX

If you wish to receive a free copy of the brief version, please write to:
Leg Ulcer Guideline – brief version
Nursing Standard Publications
PO Box 33
Newport
Gwent NP1 4YN
enclosing a stamped, C6, self-addressed envelope.

REFERENCES


Royal College of Nursing/Centre for Evidence-based Learning/School of Nursing, Midwifery and Health Visiting, University of Manchester (1998) Clinical Practice Guidelines for the Management of Patients with Venous Leg Ulcers: Recommendations for Assessment, Compression Therapy, Cleansing, Debridement, Dressings, Contact Sensitivity, Training/Education and Quality Assurance. Harrow, RCN Publishing.


