Leg ulceration: impact on everyday living and health-related quality of life

What is it like to live with a leg ulcer?
We have some information on this from various sources:
- Qualitative studies — everyday experiences
- Generic studies — health-related quality of life
- Condition-specific tools.

Qualitative studies
Ten qualitative studies1-10 have explored, through various methodologies, patients’ experiences of living with a leg ulcer:
- In eight studies physical symptoms were a major problem
- In five studies there was a perception that ‘no-one listens’
- Seven studies demonstrated a negative psychological experience.

Hopde et al.3 undertook a study of 12 women who had been living with leg ulceration for over three years. In a series of interviews they explored:
- Gaining and maintaining control over their limb
- Living with symptoms
- Lifestyle changes/impaired mobility
- Loneliness
- Coping/determination/hope.

Neil and Munjas,9 using Heideggerian hermeneutics, interviewed 10 patients with chronic wounds and found that two constitutive patterns with six themes emerged, including contending with the wound and staying at home (staying back from life).

Other studies have explored:
- Gender differences: the impact on females may be greater (which contrasts with Lindholm et al.’s suggestion)
- Patients with ulcers of less than 24 months’ duration had less pain and better general health.
- Another study, which again used the Nottingham Health Profile, surveyed 758 patients with leg ulcers in six community trusts.16 This was a cross-sectional study and found that there was poor health-related quality of life in all domains and, in particular,

References
11. Ebbeskog and Ekman.
12. Lindholm et al.
15. Lindholm et al.'s suggestion.
Female, 61 years ‘[The ulcer] has been improving all the time, but going into the new bandage quickened up the healing process and I never looked back. And now it is completely healed, which is wonderful after eight years’

that women experienced less energy, disturbed sleep, lack of mobility, emotional reactions, increased physical pain and social isolation.

Condition-specific tools
As the name suggests, these are devised to explore specific domains in regard to defined conditions. The Cardiff Wound Impact Schedule (CWIS) was devised by Price and Harding in 2004 and was validated against the SF-36 tool. It allows the assessment of standard psychometrics, and is sensitive to healing status. It comprises sections on:

- Physical symptoms and everyday living — 12 items: ‘extent of problem’ and ‘associated stress’, each on a five-point rating scale
- Social life — seven items: ‘extent of problem’ and ‘associated stress’, each on a five-point rating scale
- Well-being — seven items: each on a five-point Likert scale
- Satisfaction with QoL

All scales were transformed to an 0–100 point scale on completion.

In a study of 124 patients, the CWIS showed reliability and internal consistency, with the following results:

- Physical symptoms = 0.88 and 0.95
- Social life = 0.96 and 0.93
- Well-being = 0.77.

(Levels over 0.7 are acceptable.) Mean scale scores by wound status are given in Table 1.

Table 1. Mean scale scores: CWIS by wound status

<table>
<thead>
<tr>
<th></th>
<th>Healed (n=46)</th>
<th>Non-healed (n=89)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical symptoms</td>
<td>87.6</td>
<td>71.1</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Social life</td>
<td>84.7</td>
<td>76.1</td>
<td>0.025</td>
</tr>
<tr>
<td>Well-being</td>
<td>50.8</td>
<td>38.7</td>
<td>0.0001</td>
</tr>
<tr>
<td>Global QoL</td>
<td>7.2</td>
<td>6.9</td>
<td>NS</td>
</tr>
<tr>
<td>Satisfaction with QoL</td>
<td>7.8</td>
<td>6.7</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

CWIS = Cardiff Wound Impact Schedule
QoL = Quality of Life

allocated to receive Profore (Smith & Nephew) and 99 patients to original four-layer bandaging. At study end, 167 patients healed; significant differences in sleep, bodily pain and mobility were found compared with non-healers, but there were no differences in other domains.

Another study explored the outcome of four-layer bandaging versus superficial venous surgery. Fifteen participants were given a questionnaire pre-treatment, and then at four and 12 weeks. Loftus devised this questionnaire based on EuroQol. (Quality of Life). Both groups improved (surgery p<0.001, four-layer bandaging p=0.019), with no differences between them.

Franks et al.’s study again compared four-layer bandaging with short-stretch bandaging on 139 participants (two data points) using the Nottingham Health Profile on entry, trial end and 24 weeks:

- Differences: healed and open (bodily pain p=0.008, emotion p=0.007, social isolation p=0.024)
- No differences between the systems.

Conclusion
We can see from a range of studies using a number of different methodologies that a pattern emerges, such that patients with chronic venous ulceration perceive their quality of life as poor.

Although few in number, studies are beginning to show that appropriate management that includes a good compression system can result in improvements in both quality of life and clinical parameters.