Will Quality of Life and Patient Comfort Improve with a New 2 Layer Compression Bandaging System?*
Andrea McIntosh RN, BSN, CWOCN, APN; Linda Galvan RN, BSN, CWOCN, APN; Christine Barkauskas RN, BA, CWOCN, APN
Silver Cross Hospital, Joliet, Illinois

Introduction

• Compression therapy is an essential element for managing edema associated with leg ulcers.1
• Adequate treatment is effective at improving the quality of life of patients with venous ulcers.2
• An ongoing challenge for clinicians is to meet patient-centered needs (comfort, ease of use, non-interference of functional activities) while adequately reducing edema to promote venous leg ulcer healing.

• Limitations of current compression devices negatively impact patient quality of life and treatment protocol adherence. These limitations include patient discomfort, product slippage, and overall dissatisfaction with the compression materials.3,4

About the QoL Tool

Several validated tools are available to assist clinicians and researchers in understanding how chronic wounds affect patients’ everyday lives and their emotional response to these effects.

A quality of life tool, the Cardiff Wound Impact Schedule,5 has been developed specifically for patients with leg ulcers and diabetic foot ulcers. It measures Health Related Quality of Life as it relates to physical symptoms and everyday living. 3 scales are used: physical symptoms and everyday life, social life (ability to get out and about), and well-being, including anxieties about their outcome. This tool was selected to learn how product design and performance attributes affect patients’ overall response to their condition and treatment. Use of a QoL tool may assist clinicians in evaluating the effectiveness of a new technology.

Case Study 1

Patient History

48-year-old female with a 70-week H/O venous insufficiency and obesity. Seen in outpatient wound clinic for 23 weeks for multiple, full thickness wounds with minimal success in spite of adherence to a variety of compression methods and wound treatment.

Discussion

This patient requested continuation in the 2 layer system after the completion of the 8 week study. She could wear normal shoes and was more comfortable. Overall quality of life scores improved: 5 (baseline), 6 (week 4), and 8 (week 8). Wound healing progress continued. See photos below.

Case Study 2

Patient History

55-year-old male. Wound present for 60 weeks. ABI 1.0. H/O venous insufficiency, morbid obesity, hypertension and lymphedema. Prior to being seen in the wound center, he was treated for 16 weeks by home health care.

Discussion

Overall quality of life scores improved during the 8-week study, with progress in healing: 4 (baseline), 6 (week 4), 9 (week 8).

Case Study 3

Patient History

39-year-old male. Wound present for 19 weeks. ABI 1.04. H/O chronic venous insufficiency, lymphedema and multiple, full thickness venous ulcers. He has received twice weekly visits for management of heavy wound drainage and multiple ulcers for 2 months prior to study initiation. One primary lesion was selected and followed during course of study.

Discussion

This patient progressed over the study duration. He preferred the 2 layer system because it was faster to apply and to remove resulting in shorter clinic visits. Overall quality of life scores improved during the first 4-week period: 4 (baseline), 5 (week 4), and 4 (week 8).

Discussion

These 3 patients are a small subset of 80 subjects enrolled in a randomized, cross-over study comparing 2 compression systems, so the analysis of the Quality of Life differences between the 2 systems cannot be predicted.

Because these subjects were wearing high compression systems during the 8 week study, all experienced wound healing progress.

Several benefits were experienced by all 3 subjects while wearing the new 2 layer system, including:

• Less slippage
• Improved comfort during wear
• Less sleep disturbance
• Less interference with footwear

All patients noted that their clinic appointment time decreased due to the easier removal and application of the 2 layer system. Two patients also acknowledged that the bandage system was “cooler than the 4 layer wrap and not as itchy”.

References


*3M™ Coban™ 2 Layer Compression System, 3M Health Care, St. Paul, Minnesota
**Profore™ Multi-Layer Bandaging System, Smith & Nephew, Hull, UK

Study Sponsored by 3M Health Care

Presented at SAWC 2007 Tampa, FL