

USING AN INNOVATIVE COMPRESSION SYSTEM TO IMPROVE PATIENT CONCORDANCE AND QUALITY OF LIFE WHILST ACHIEVING CLINICAL AND FINANCIAL OUTCOMES



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Introduction

Leg ulceration has a profound impact on patients’ lives. Those with venous and mixed aetiology are required to tolerate compression bandage systems. This can affect:

- self-esteem
- footwear choice
- cleanliness
- patient comfort (Edwards 2003).

One of the biggest challenges working with patients with leg ulceration is achieving concordance with optimal compression therapy. Patients receive sub-optimal compression for a variety of reasons, namely:

- comfort
- pain
- footwear
- large, heavy limbs
- poor bandage technique.

Utilising an innovative inelastic compression system (Juxta CURES™) can eliminate these issues and provide the clinician with an easy alternative. In addition this system improves quality of health care and reduces costs as specified in the government QIPP agenda (2013).

Method

- The study involved a district nurse team with:
 - 9 venous ulcers
 - 5 ulcers of mixed aetiology
 - 1 patient had ulcers on both legs
 - Patients being seen either in the leg ulcer clinic (7) or in their own home (7).
- All patients were offered the innovative compression system - this ranged from new patient referrals through to patients already in traditional compression bandaging.
- All patients were evaluated quantitatively and/or qualitatively.
- The clinicians involved in the study received comprehensive training on the system to ensure a consistent approach during evaluation.
- The duration of the leg ulceration being treated ranged from new onset to 2.5 years. Compression level ranged from 20 mmHg to 40 mmHg.
- When converted to the new system, the patients compression level was not changed. Patients new to compression therapy were started on compression levels suitable for their ABPI and clinical presentation.

Results

Patients

- All patients showed wound improvement and improved overall skin integrity
- 5 patients progressed to complete healing during this 10 week study period
- 3 patients chose to remain in the new system after healing as opposed to hosiery
- 4 patients were able to self manage, resulting in reduced nursing time
- The system was tolerated by 11 patients at the same or higher compression levels
- 3 patients changed to alternative compression due to a fall; preference or for management of lymphoedema



Fig 1 shows a patient who had previously declined compression bandaging due to footwear issues, is delighted with the new system.

The Everyday

“I am able to drive”
“self management helps as taking time out for appointments is difficult”
“this is much more comfortable to wear in warm weather”

Cleanliness

“Not being able to wash my leg every day whilst in bandages is like not cleaning my teeth”
“I can shower twice a day now”

Stigma

“Not as embarrassing as bandaging”
“I prefer this to all those bandages”

Movement

“I know the tension required and find it easy to get it consistent at each reapplication”
“100% improvement – able to wear my everyday shoes”

Adapted from International Consensus (2012)

Results

Clinicians

- 96% of clinicians recorded ‘very good’ or ‘excellent’ for:
 - > ease of application
 - > fit
 - > application time
 - > use of the Built in Pressure measurement system (BPS™)
- Clinicians particularly valued being able to accurately measure the compression levels through the Built in Pressure measurement system. Achieving accurate graduated compression is very dependent on nurse skill and education (Reynolds 1999) and this new system helped eliminate this risk.
- The clinicians also reported reduced nurse time spent applying the new compression systems as apposed to traditional compression bandaging.

Financial

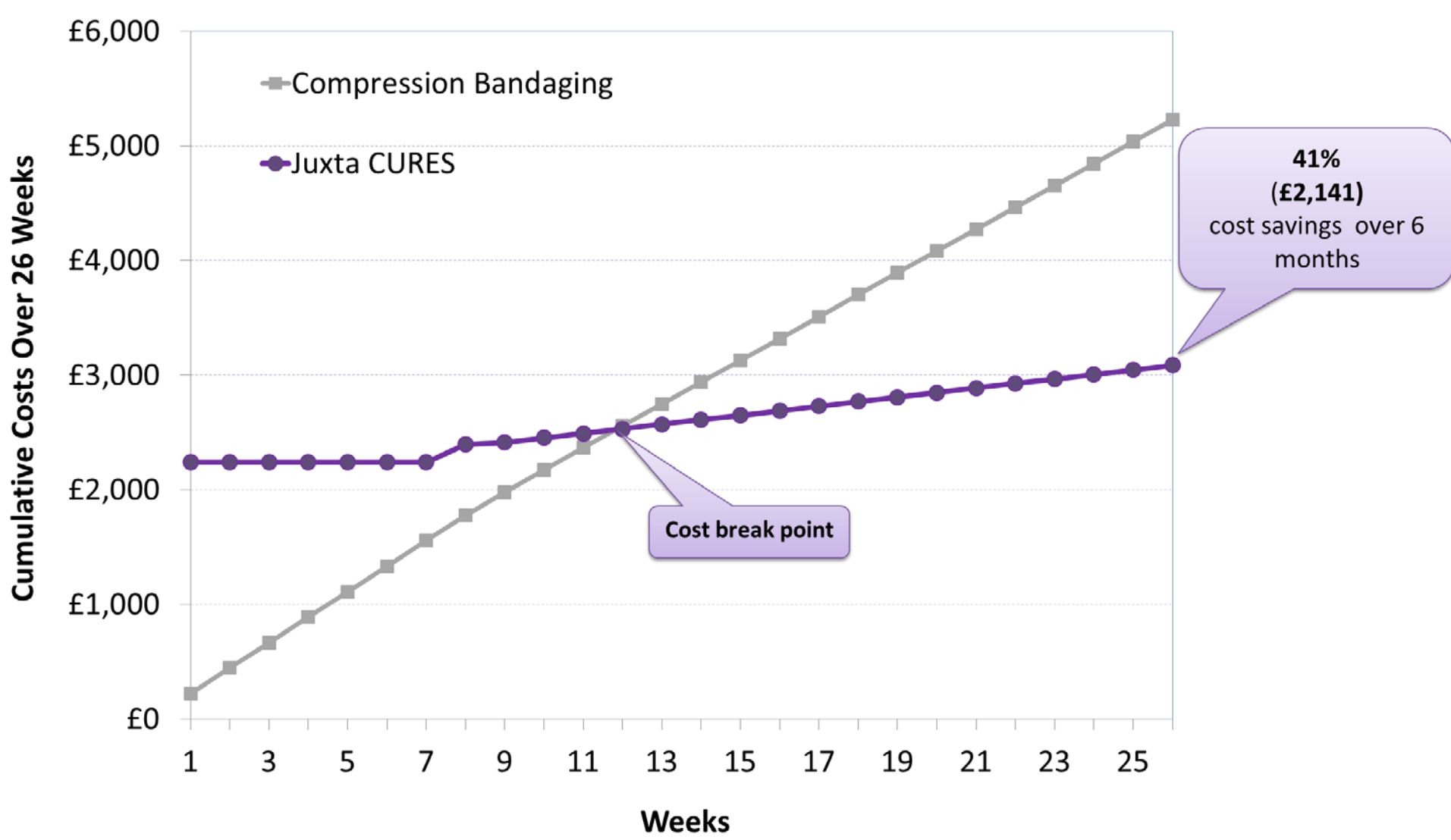


Fig 2 Cumulative costs of compression bandaging compared to Juxta CURES over a 26 week period per patient.

A positive cost saving has been realised at week 12 after the initial outlay of the cost of the new compression product.

Conclusion

- This innovative compressions system:
- improved quality of life and wound healing for 12 out of 14 of the patients.
 - provided the clinician and patients with solutions to the problems associated with traditional compression therapy.
 - promoted self-care
 - resulted in financial savings versus traditional compression bandaging in materials, nurse time and clinical waste.
- This study has demonstrated that this compression system (JuxtaCURES™) eliminates all the issues identified and therefore should be considered as a compression option for all patients requiring compression for leg ulceration.

References

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