

CASE STUDY: THE MANAGEMENT OF CHRONIC OEDEMA/LYMPHOEDEMA IN THE NURSE-LED LEG ULCER CLINIC

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Introduction

Lymphoedema is a progressive chronic condition, defined as swelling of >3 months duration and has been identified in 1.33 per 1000 population UK.,(2003) (Irish figures unavailable). Patients present with painful swollen limbs. This limb distortion is due to the accumulation of fluid and other elements (e.g. protein) in the tissue spaces. Many patients suffer pain, recurrent infection, skin problems, immobility and huge emotional issues because they are denied care through the limited understanding of the condition and the inadequate treatment pathway.

Data Analysis

Full holistic assessment

Nurses' knowledge of the holistic approach to leg ulcer assessment is essential for effective and safe practice. Holistic assessment involves physical, psychological, social and investigative needs, i.e. the Doppler assessment (Greally and Wardick, 2009). Doppler assessment is used to exclude occult arterial disease prior to the application of compression therapy (Crest, 1998). Lower limb measurements were recorded prior to bandage application in order identify initial limb circumferences.

Findings

Initial Assessment 27 April 2009

ABPI	Lt-1.03	Ankle Circumference	Lt-34cm	Rt 33.5cm
	Rt-1.01	Calf Circumference	Lt-41cm	Rt 38cm

Compression therapy applied – SSB

Home visit

15 May 2009

Treatment discontinued, due to discomfort and pain



Clinic visit 23 June 2009

Compression re applied

ABPI	Lt-1.1	Ankle Circumference	Lt-33cm	Rt-32.5cm
	Rt-1.2	Calf Circumference	Lt-41cm	Rt-37cm

Clinic Visit 18 August 2009

Measured for Actilymph compression hosiery

Ankle Circumference	Lt-26cm	Rt-25cm
Calf Circumference	Lt-33cm	Rt-32cm



Home visit

4 Sept 2009

Measured and compression hosiery applied.



Purpose of the study

This case study illustrates the effectiveness of short stretch bandaging ACTICO in the treatment of bilateral lower limb oedema. Factors which are vital in its management include full holistic assessment (ABPI), patient education, skin care and the concordant nurse-patient relationship (Mandel, 2006).

The subject of the study was Mrs S, a 63year old lady with a medical history of epilepsy. She presented with a 5 year history of lower limb oedema.

Method

Following a full holistic assessment, including Doppler studies and limb measurement, a treatment plan was discussed. Mrs S was happy to proceed with the prescribed treatment, i.e. multi-layer inelastic bandaging ACTICO and compression hosiery (ACTILYMPH).

The bandaging system was applied and the patient was monitored regularly by both the community nursing service, and the nurse-led leg ulcer clinic. The lower limbs were reviewed by the TVN where measurements and photographs were taken on a regular basis.

The treatment aims were to:

- To reduce lower limb volume thereby improving the patients quality of life
- To maintain and improve skin integrity
- To promote patient understanding ensuring collaboration and joint participation between nurse-patient

Discussion

Mrs S found the compression bandages comfortable following initial assessment and was encouraged to elevate the limbs when possible. Her bandages were changed by the nurse twice weekly. After a 3 week period, Mrs S complained of pain and discomfort and wished to discontinue the compression therapy.

She was seen by the TVN in the nurse led clinic a week later where she presented with 'bilateral leaky legs'. Mrs S remained resistant to the application of compression therapy, therefore alternative therapy was agreed (paste bandages). A review date was agreed for 3 weeks time.

Mrs S was reassessed in leg ulcer clinic on 23 June 2009, ABPI Lt 1.1 Rt-1.2, and lower limbs were remeasured. The lower limb measurements had increased in the absence of compression therapy. Following a discussion regarding treatment plan, Mrs S agreed to recommence compression therapy. Mrs S care continued with weekly visits from the TVN and PHN, which enhanced the nurse-patient relationship.

Following a 7 week period of compression bandaging Mrs S was reviewed in the nurse led clinic. Her lower limbs measurements had decreased substantially, she was no longer complaining of pain and discomfort and her skin was in good condition.

Ankle circumferences reduced by 8cm on the left and 8.5cm on the right.

Calf circumferences reduced by 8cm on the left and 6cm on the right.

Mrs S was measured and fitted for Actilymph compression hosiery (Activa).

Conclusion

As tissue viability nurses, we are committed to the continuous improvement in wound care and quality of life issues for our patients, but it can be a challenge when we begin new treatment pathways.

This patient had been inappropriately managed for 5 years. However this intensive treatment in the nurse led clinic, consisting of short stretch bandage, skin care and enhanced support, saw a significant reduction in limb volume.

Quote from Mrs S: 'amazed that after only 4 months, my legs are nearly normal'. This reduction will be maintained through the use of compression hosiery, greatly improving her quality of life.

Continual assessment will be undertaken.

Recommendations

As professionals, we must continue to strive to gain knowledge and skills through **continuous education** to provide affective care and to ensure that chronic oedema / lymphodema are placed firmly on the health service agenda.

It is important to recognise the different causes and presentations of chronic oedema/ lymphoedema and initiate early intervention to avoid complications and to improve outcome and quality of life for the patient

The patients and their family play a vital role in this treatment regime, because without commitment to limb elevation, shin care and compression, the nurses' efforts may be in vain. **Joint participation** is essential to ensure a positive outcome.

References

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Acknowledgments

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Abbreviations

ABPI ~ Ankle Brachial Pressure Index • SSB ~ Short Stretch Bandage • TVN ~ Tissue Viability Nurse