

# Chronic oedema - a patient's perpetual journey for treatment

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## Introduction

Chronic lymphoedema is widely seen in the healthcare arena, but is rarely acknowledged and can be left untreated for many years. The management of chronic wounds and lymphorrhoea is a huge financial burden estimating to cost over 3 billion annually. It is also a real challenge to healthcare clinicians, with patients being mismanaged with inappropriate treatment. Many patients with lymphorrhoea are left to manage the leaking with an absorbent dressing pad and a compression tubular support. This does not stop the oozing fluid and the skin can become macerated. Patients often feel that they are unable to go out and their quality of life is poor. If patients have a leaking limb or a chronic wound then they are also at risk for developing cellulitis. This case study illustrates a patient's 18 year journey to access the correct lymphoedema treatment and the implications of poor management.

## Method

A 58 year old man, Mr T, was diagnosed with bilateral lower limb lymphoedema in 1991 by his General Practitioner. In the last 18 years he has been referred to numerous specialities including vascular, dermatology, cardiology, community nurses, chiropody, diabetic teams and eventually in September 2009 was referred to a lymphoedema service. For the last five years the community nurses have seen Mr T for management of wounds and copious lymphorrhoea using dressings, pads and long stretch bandages. These had to be replaced on a daily basis as the lymphorrhoea had saturated the bandages within hours of application. Circular knit compression garments had also been issued which were poorly fitting, causing superficial wounds around the knee. He had become housebound, morbidly obese and had been hospitalised with recurrent cellulitis on an annual basis. Furthermore in the last year he had been sleeping in an armchair due to the lymphorrhoea. On assessment:

- Big toe on right leg was unrecognisable and so big that it resembled a fist
- Unable to wear any outdoor footwear for 3 years
- Permanent putrid offensive smell
- Clothes and slippers were constantly soaking wet from lymphorrhoea
- Chronic widespread hyperkeratosis
- Numerous chronic superficial wounds
- Cellulitis present in the right leg
- Past history includes type 2 diabetes and angina



Antibiotics were immediately arranged for the cellulitis, as was discontinuing the ill-fitting circular knit compression garments. Daily washing with a water based emollient, including thorough drying and moisturising with an emollient cream was recommended.



A lymphoedema treatment program was planned for October 2009 consisting of daily attendance at the lymphoedema service. The superabsorbent dressing<sup>1</sup> used had the ability to absorb large quantities of fluid keeping it away from the limb and fully breathable. This was applied to multiple areas that were leaking lymphorrhoea. The chronic hyperkeratosed areas were dressed in a hydrocolloid dressing.

Both limbs were covered with tubular retention bandages<sup>2</sup> as a protective layer. Numerous rolls of an undercast padding in a variety of sizes were used to pad the limb into a cylindrical cone shape. Special attention was made to the regions around the ankle and knee, making sure all creases were adequately padded out.

As the lower limbs had been leaking copiously and were very swollen. A cohesive inelastic bandage system<sup>3</sup> was applied. Cohesive inelastic bandages come in a variety of sizes and the cohesive properties can aid practitioners in applying bandages in a safe manner also knowing that the bandages will stay in place. As oedema was evident throughout the lower limbs full leg bandaging was applied. Initially 2 layers of a cohesive inelastic bandage system were used, but by the third week 3 layers of cohesive inelastic bandages were applied - to increase the compression and reduce the oedema further.

Basic mobility exercises were taught and encouraged, as well as immediate compliance in returning to bed at nights. Strong emphasis was made that full compliance had to be met, otherwise the treatment plan would be hindered by Mr T non-compliance.

## Results

Mr T was treated at the lymphoedema service on 14 occasions over 4 weeks. No strike through from the lymphorrhoea was seen using the superabsorbent wound dressing and a cohesive inelastic bandage system. After 8 treatments all leakage had stopped and wounds were completely healed. The superabsorbent wound dressing had allowed the skin to dry, reducing the maceration and redness. The hydrocolloid dressings helped remove a significant amount of the hyperkeratosis.

## Within the 4 weeks of treatment

- Mr T lost 5,252mls of fluid off the right leg and 6,040mls off the left leg.
- His weight reduced by 16kg.
- His mobility and exercise tolerance had significantly improved reporting he was walking further each day
- Went shopping in a supermarket for the first time in 4 years
- Returned to his role as a volunteer with the air training cadets
- Joined a gym!
- Was back sleeping in bed for 6-8 hours per night
- Could wear shoes and clothes that he had not been able to wear in 10 years
- Felt positive for the first time in many years
- Was amazed at how simple and effective the treatment was and questioned why he had not received this many years ago

He was fitted with made to measure flat knit class 2 compression garment thigh length and recommended to wear them 24 hours for the first month and then reduce to wearing the garments 16 hours thereafter.

## Discussion

Chronic lymphoedema and lymphorrhoea management is complicated and can involve numerous healthcare professionals. Mismanagement can lead to an exacerbation of symptoms causing unnecessary distress for patients. Timely referral to a lymphoedema service is fundamental - as well as adequate knowledge on which products are suitable and effective for successful management.

## Conclusion

Earlier referral and correct management would have prevented the long term consequences of this case study. Not only did Mr T suffer unnecessarily but the NHS could have saved substantially in reduced cellulitis episodes and manpower hours. Using superabsorbent wound dressings with a cohesive inelastic bandage system have resulted in a very successful treatment programme as now Mr T only needs to attend the lymphoedema service every 4 months for renewal of his flat knit compression garments.

Getting the timing right as well as awareness and education is so very important.



<sup>1</sup> Flivasorb® superabsorbent wound dressing available from Activa Healthcare, UK.  
<sup>2</sup> ActiFast® tubular retention bandage available from Activa Healthcare, UK.  
<sup>3</sup> Actico® cohesive inelastic bandage system available from Activa Healthcare, UK.