



Primary Lymphedema

The Unilateral Lower Extremity; Methods and Results

A Case History

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Importer of Solaris lymphedema care products

Introduction

John Mulligan, RMT/CLT-LANA

- Registered Massage Therapist (Massage Therapist since 1997)
- Certified Lymphedema Therapist
- Graduate of Lerner Lymphedema Academy (1998)
- Certified by LANA (Lymphology Association of North America) (2001)
- Vice-President and Clinical Specialist with Lymphedema Depot Ltd, Importer & Canadian Distributor of Solaris lymphedema products



History

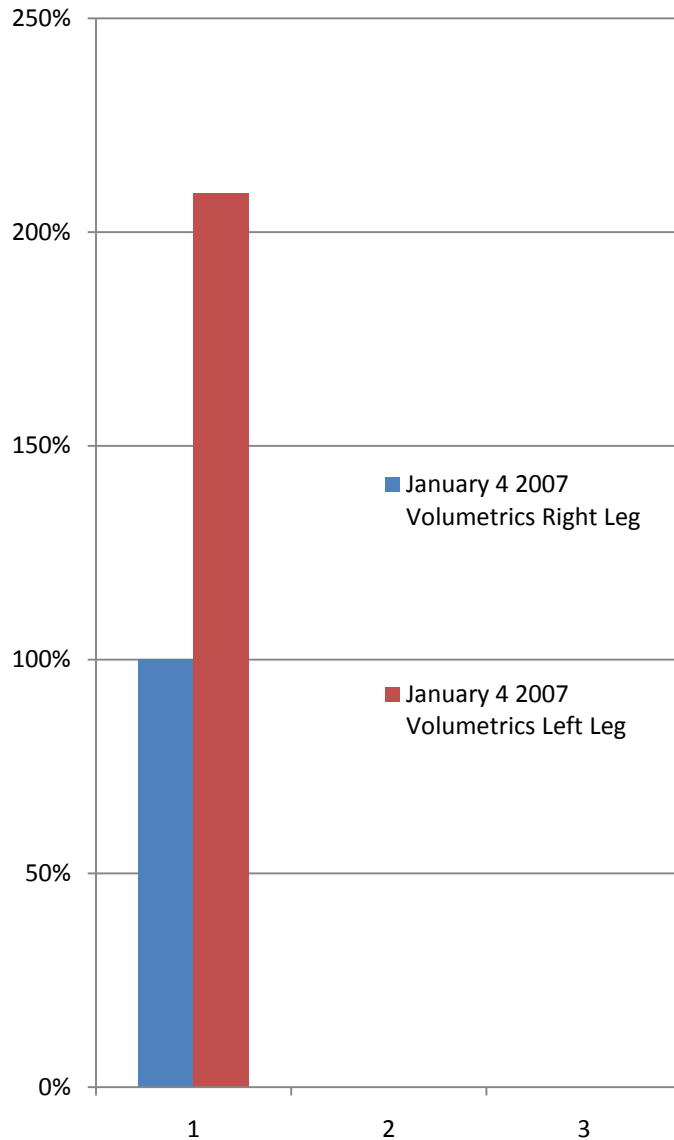
- 23 year-old woman with history of untreated primary lymphedema.
- Lymphedema present from about age of 10.
- Severity of condition began to increase at age 17.
- When this picture was taken, at age 23, ambulation was compromised due to swelling. The patient was also considering surgical intervention at this time.
- Entire left lower quadrant is affected.
- Patient is in good health with no contraindications to treatment.



Day 1

The widest circumference of the lower leg is 82.5 cm.

Same point on the right leg: 33.5 cm circumference.



This is a volumetric diagram of the right lower extremity (blue) and the left lower extremity (red) from measurements taken before treatment was begun.

The left is greater than the right by 209%.



Treatment

- MLD (manual lymph drainage)
- Multi-layer lymphedema bandaging
- Patient education re; lymphedema and self-care
- Therapeutic exercises.

Frequency and Duration of Treatment

Treatment was administered in

- 90-minute sessions
- 3 times a week
- for 3 months

Further Notes on Treatment

Entire left lower extremity drainage area was affected.

This includes:

Left leg

Proximal lateral aspect of left hip

Left supra-pubic and abdomen

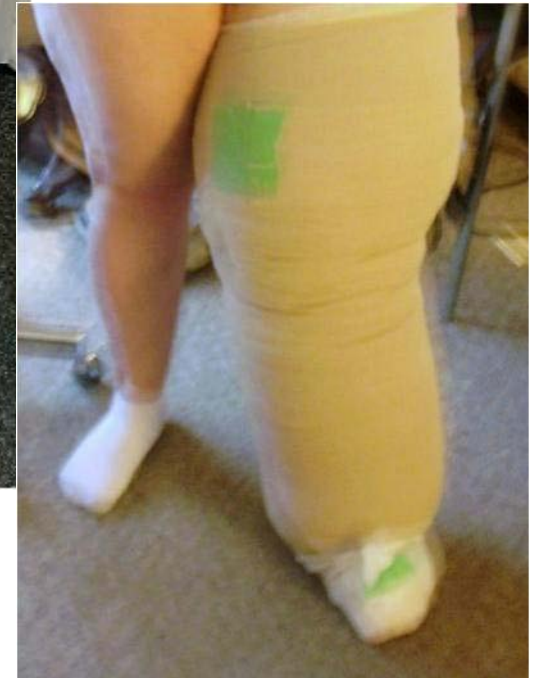
Left gluteal region

Genitalia were spared from swelling.

Swelling was visible to level of transverse watershed and to the midline anteriorly, laterally and posteriorly.

Areas above the inguinal crease and gluteal fold were treated with MLD, within personal limits; there was no attempt made to bandage them. The lateral hip area was bandaged as well as possible.

These proximal body areas were treated with the nighttime bandage replacement garment which is in a half-chap style with a belt. After a year of self-management there was evident and palpable improvement in these areas.



**Multi-Layer
Lymphedema Bandaging**



Multi Layer Lymphedema Bandaging

Multi-Layer Lymphedema Bandaging consisted of:

- Emollient lotion (Eucerin, Lymphoderm, or appropriate equivalent)
- Tubular Gauze.

This patient required 2 pieces of TG for size; one from foot to knee and one from knee to groin.

- Gauze toe wrap
- Artiflex or Cellona underpadding
- Foam

Initially: White Komprex II
Rosidal Soft

After two weeks: ½" Gray Foam , cut to fit.

- Fixing bandage
Lenkelast medium stretch
- Short Stretch bandages (Rosidal)



**After three weeks of treatment,
reduction is visually significant.**



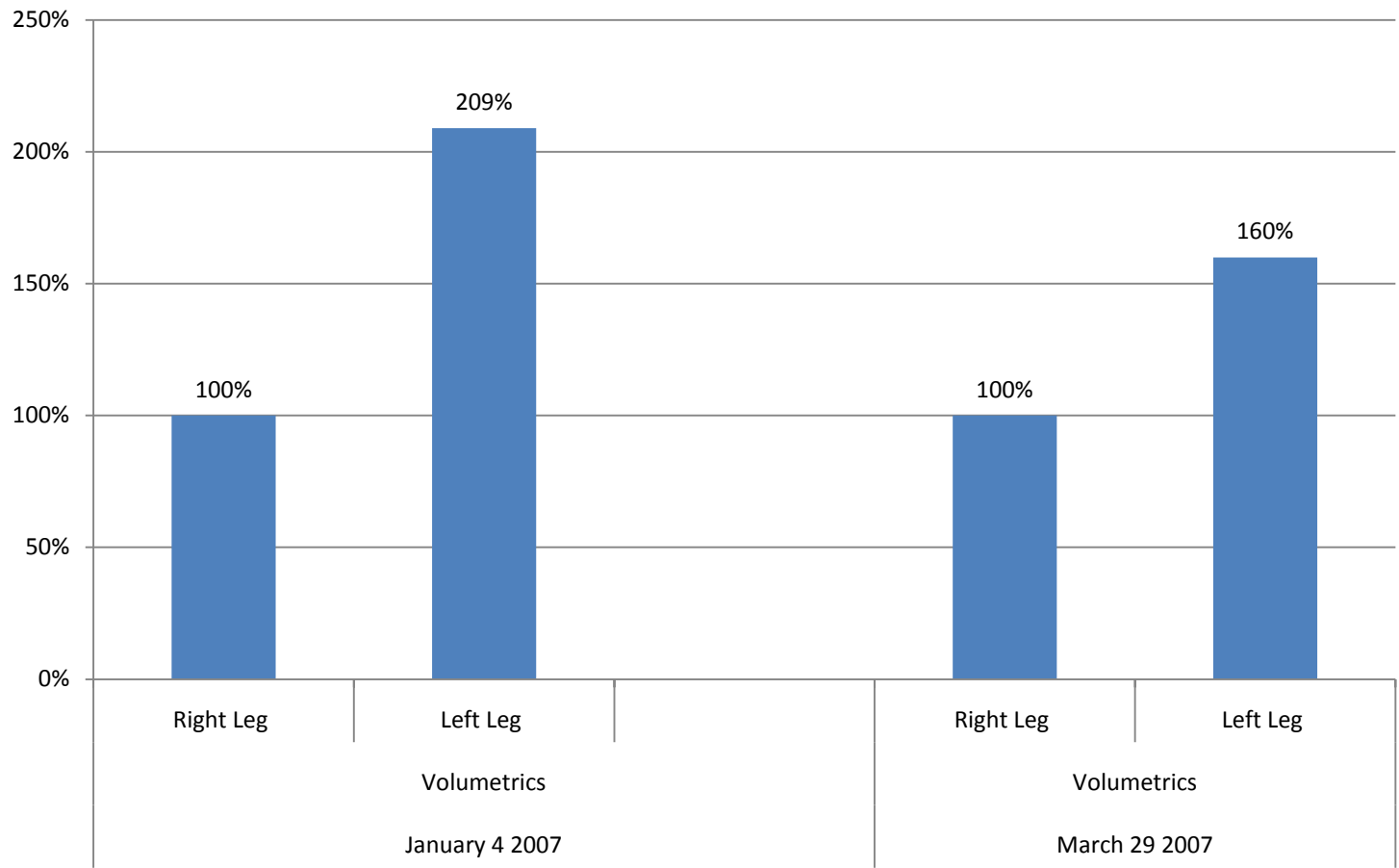
There is already the beginning of good reduction of swelling. While still large, the edematous leg is no longer tight.



After three weeks of treatment we see initial mobilization of fluid has occurred. At the end of the first month of treatment 27% reduction had been achieved.



After the initial treatment period of three months a reduction of 49% was achieved.





At one-year follow up; high compliance with self-management yields results.



Self Management Regimen

Wearing compression hose daily

Mediven Forte custom A-G leg garment

Compression Class 3 (40-50 mmHg)

Mediven 550 Custom Toecap (open toes)

Compression Class 2 (30-40mmHg)

Nightly use of Nighttime Bandage Replacement Garment

Solaris Tribute Lower Quadrant Chap with Chevron Channels

Gradient Compression 28-30mmHg

Worn with Outer jacket which increases gradient compression by approx. 10mmHg

Therapeutic exercises as schedule permits.

Meticulous cleanliness and skin care.

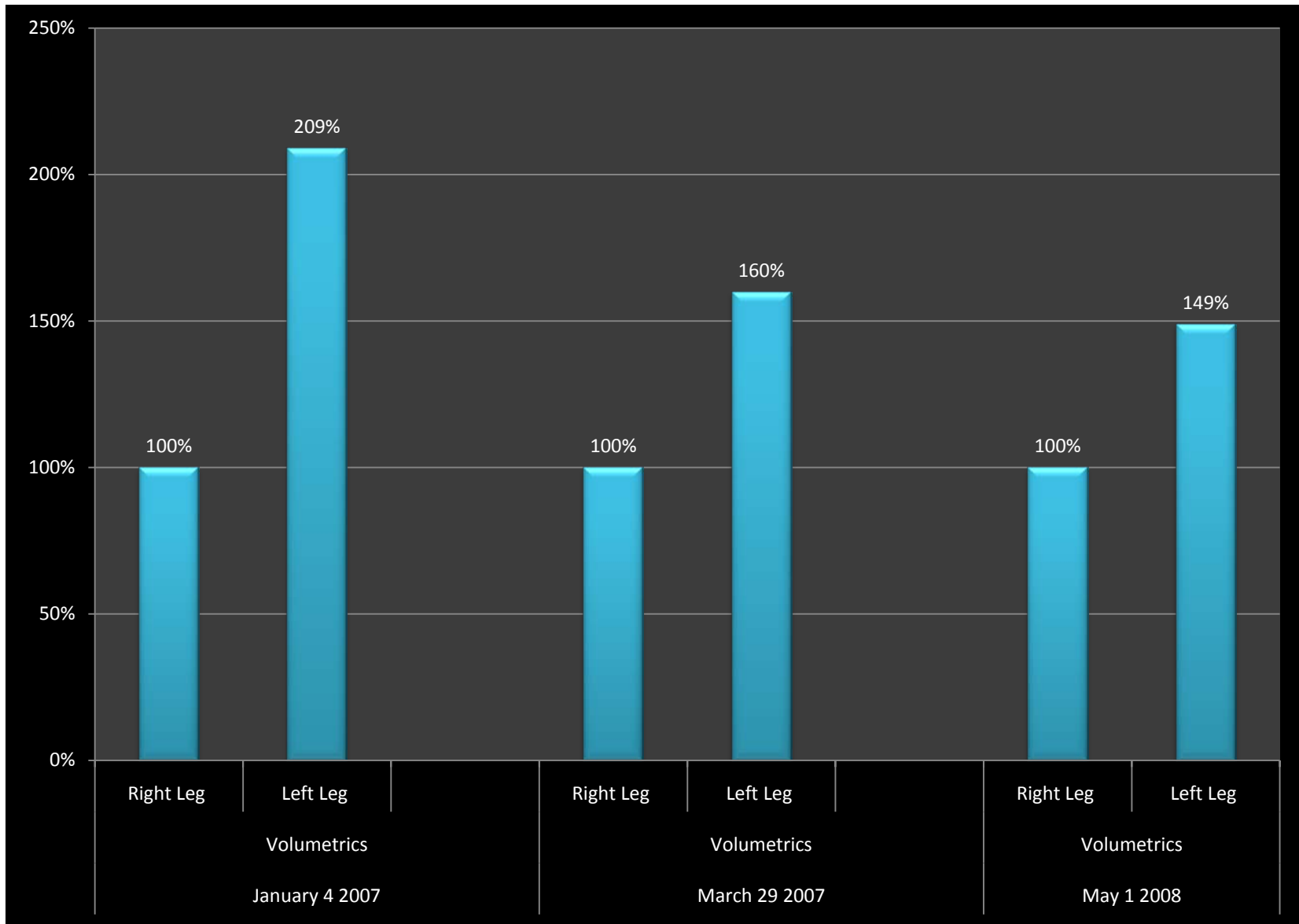
Subject is a motivated patient; if self-care becomes lax she self-corrects to control swelling. Her compliance is generally excellent and she maintains high spirits and high function despite having severe lymphedema.



The nighttime bandage replacement garment is a made-to-measure quilted garment, with medical grade foam chips sewn into the channels . The channels are designed to guide fluid laterally and proximally. The leg portion has a working compression of about 30mmHg. The body part is meant to fit comfortably. The foam chips create high and low areas of pressure which helps resolve indurate tissue and also exerts a stretch and pull similar to the actions of MLD. As a result, even the body part is therapeutic although it may have less compression. In this case it has been very effective.

***full disclosure**







January 25 2007



April 28 2008



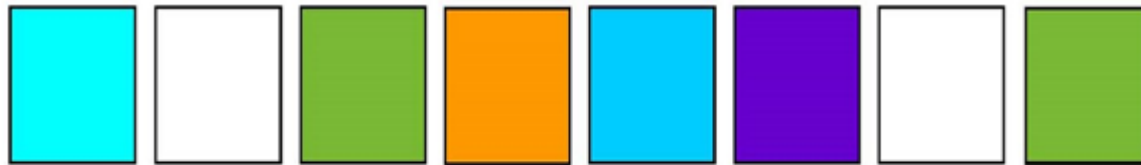
January 3, 2007



April 28, 2008



Thank you for your attention, and for your attendance.



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