

APPLYING ADVANCED TECHNOLOGIES TO THE MANAGEMENT OF LYMPHOEDEMA

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... performance for life

A working example

How technology has been developed to help address a global problem - Lymphoedema



WHAT IS LYMPHOEDEMA?



What is Lymphoedema?

A disturbance or disruption of the body's lymphatic system

Primary Lymphoedema

- Usually developed at birth, caused by genetic malformation

Secondary Lymphoedema

- Caused by damage to the Lymphatic System as a result of trauma

Why is our lymphatic system so important?

- 3rd Component of our Cardio Vascular System

Lymphatic system can be considered as the Body's recycling system

- Network designed to remove toxins, waste and other materials from the body
- Fluid is checked for infections so that the body's defence system can be alerted

Apart from surgical intervention, there is no cure

WHAT IS LYMPHOEDEMA?



What are the signs of Lymphoedema?

- Visually apparent
 - Can affect any part of the body - legs, arms, genitalia, head and neck
- Large scale swelling resulting from fluid retention

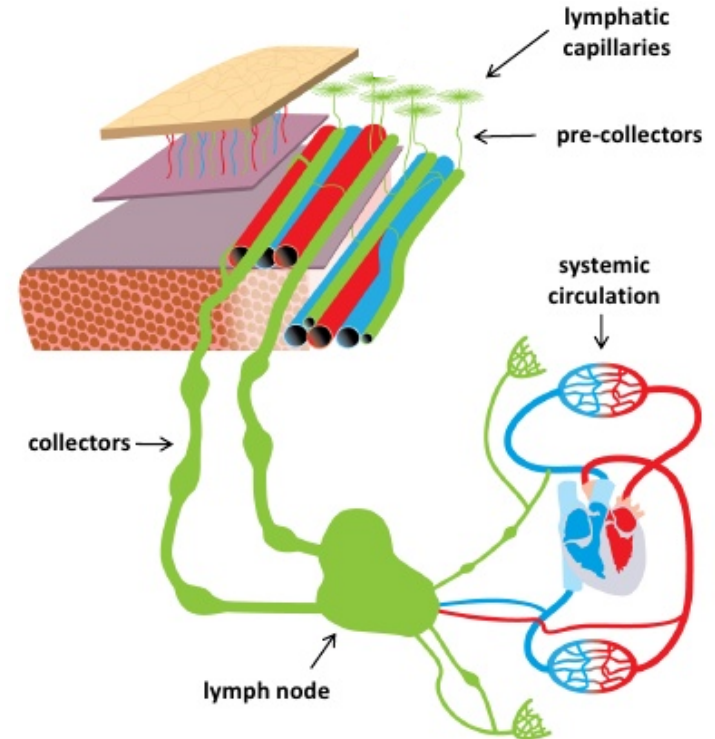
Secondary complications include

- Impaired mobility due to bulk
- Chronic pain
- Increased incidence of acute inflammatory infections
- Psychological complications including impact on lifestyle

The Lymphatic System

Complex network located around the body comprising

- Lymphatic capillaries & the initial lymphatics
- Pre collectors
- Collectors
- Lymph nodes (600 – 700)
- Deep lymphatic trunks – thoracic ducts
- Veins



WHAT IS THE PREVALENCE OF LYMPHOEDEMA?

What is the prevalence Lymphoedema?

Originally thought to be associated with cancer treatment – BCRL?

Most recent studies estimate:

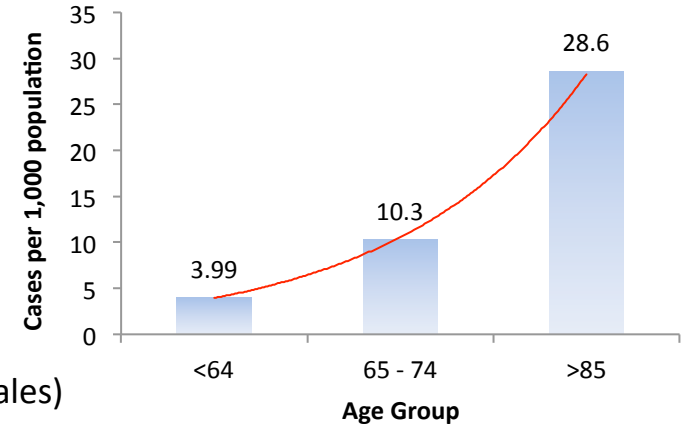
1.33 and 3.99 per 1,000 population

10.3 per 1,000 in those aged between 65 and 74

28.6 per 1,000 aged 85 and over

Total 76,000 and 227,000 cases in England (estimated 8,000 cases in Wales)

Current service provision is failing to meet current needs



What are the alternatives?

Develop supportive treatments – cost and clinically effective

Focus on the service provision and various self management options?

Introduce TECHNOLOGY to the stakeholders (Service providers & patients)

HOW DOES TECHNOLOGY PLAY ITS PART IN THE MANAGEMENT?

What are the recognised treatments?

- Surgical intervention – LVA Lympho Venous Anastomosis (super micro surgery) } Only available from a few centres in the UK. Invasive & expensive to deliver
- External compression comprising
 - Multi layer bandaging
 - Compression garments – sleeves or stockings } Stand alone products
 - Intermittent Pneumatic Compression devices (IPC) } Technology opportunity?
- Specialist type of massage / stimulus – MLD Manual Lymph Drainage or SLD Simple Lymphatic Drainage (self administered drainage) }
- Skin care } Patient self management
- Movement and exercise }



THE HUNTLEIGH SOLUTION – CLINICALLY EFFECTIVE

LymphAssist™ – Advance Intermittent Pneumatic Compression System

- Two products each tailored to address different user groups – Professional / service providers and Patients
- System comprises an ADVANCED compressor (pneumatic pump) and a range of 12 chamber garments (arms & legs)

Technology Contribution

- Intelligent pump delivers a range of complex treatment options and patterns
 - Sequential
 - Wave
 - LymphAssist – MLD replication
- Clinically effective garments
 - 12 chambers deliver patented treatment
 - Patient compliant



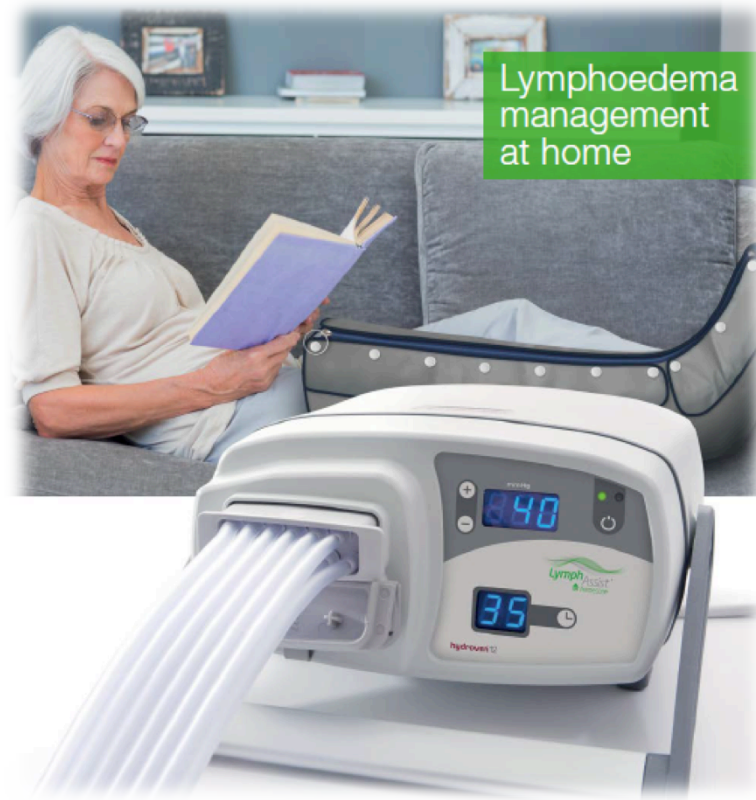
CLINICALLY EFFECTIVE SOLUTIONS

HUNTLEIGH

LymphAssist™ – Advance Intermittent Pneumatic Compression System

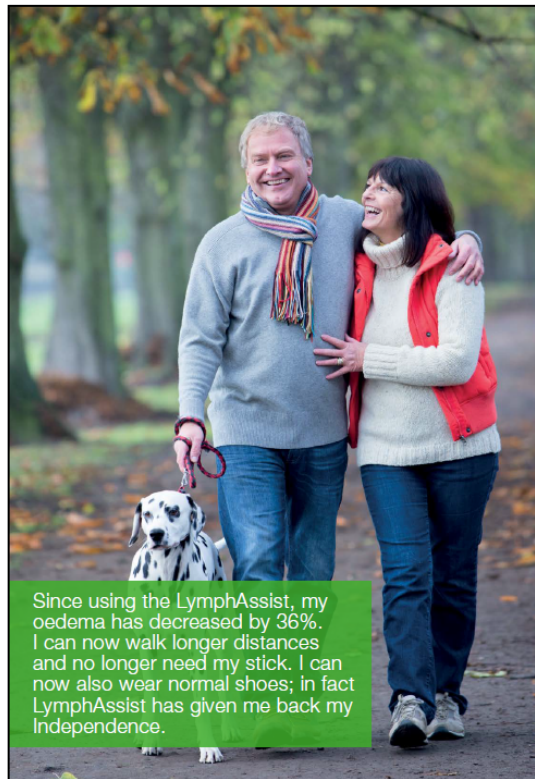
- Patented treatment profiles
 - Replicates the LEDUC method of Manual Lymph Drainage (MLD)
 - Wave, Sequential or LymphAssist treatment
- Patented garments
 - Overlapping chambers – eliminates pressure voids / creasing
 - Calibrated inward pressure – guarantees pressure profile, stimulates the superficial lymph network

Taking technology into the home



CLINICALLY EFFECTIVE SOLUTIONS

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Thank you very much

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