

sometimes  
YOU JUST  
know it's  
**TIME**  
to start  
SOMETHING  
new and trust  
THE MAGIC OF  
new beginnings

# Preface

Module 1

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## This module covers:

- Where it all Began
- Terminology
- Relationship of DLT, Lymphoedema and Lipoedema
- What is Lymphoedema
- What is Lipoedema
- Three phases of Decongestive Lymphatic Therapy

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## Learning Outcomes

- Review the history of lymphatics
- Define decongestive lymphatic therapy (DLT)
- Review global terminology for DLT
- Define lymphoedema
- Define lipoedema
- Distinguish the three phases of DLT

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### Where it all Began

460-377BC	384-322BC	335-280BC	1622
<ul style="list-style-type: none"> <li>Hippocrates spoke of "white blood" – which we now know as chyle</li> </ul>	<ul style="list-style-type: none"> <li>Aristotle identified structures containing transparent fluid termed 'sanies"</li> </ul>	<ul style="list-style-type: none"> <li>Herophilus noted the existence of mesenteric lymph nodes and milky veins (lacteals)</li> </ul>	<ul style="list-style-type: none"> <li>Historical rediscovery of the mesenteric vessels and the first official differentiation between lymphatics (chyliferous vessels) and veins made by Gasparo Asselli (Italian physician/surgeon)</li> </ul>

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### Where it all Began

1622	1622	1624	1629
<ul style="list-style-type: none"> <li>Ansell observed lacteals in the intestines of a "fed" dog</li> </ul>	<ul style="list-style-type: none"> <li>John Pecquet suggested the importance of respiration in the circulation of chyle and described the presence of valves within lymphatics</li> </ul>	<ul style="list-style-type: none"> <li>Johann Vesling recognised lymphatic vessels in humans</li> </ul>	<ul style="list-style-type: none"> <li>Jacques Mentel reported the mesenteric lacteals terminated in the thoracic duct before gaining access to the bloodstream</li> </ul>

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### Where it all Began

1648	1651	1651	1622 - 1674
<ul style="list-style-type: none"> <li>Olof Rudbeck probably the first anatomist to recognise the lymphatic system as part of the circulatory system</li> </ul>	<ul style="list-style-type: none"> <li>The lymphatic vessels, the thoracic duct, and their connections with the blood circulation described for first time by Jean Pecquet</li> </ul>	<ul style="list-style-type: none"> <li>John Pecquet suggested the importance of respiration in the circulation of chyle and described the presence of valves within lymphatics</li> </ul>	<ul style="list-style-type: none"> <li>Pecquet described the main lymphatic vessels including the thoracic duct and cisterna chyle</li> </ul>

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## Where it all Began

1630 - 1708	1648	1733 - 1817	1616 - 1680
Bartholin invented the term "lymphatic"	Olof Rudbeck probably the first anatomist to recognise the lymphatic system as part of the circulatory system	Monro Secundus found that lymphatic system was "absorbent" and distinct from blood vessels	Hewson gave a detailed description of the lymphatic system and circulating elements in the lymphatic vessels

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## Where it all Began

A horizontal timeline with a blue bar. Three points are marked with dots and connected to text boxes:

- 1892:** Emil and Estrid Vodder developed manual lymphatic drainage in France
- 1932:** Alex De Winiwarter published his book "Die Elephantiasis". He developed the basis of today's MLD, which was used in hospitals but was too heavy handed to be entirely effective.
- 1979:** The Földi Clinic was founded as a specialist clinic for lymphology in April 1979 in Germany by Professor Michael Földi and Professor Etelka Földi.

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## Where it all Began

A horizontal timeline with a blue bar. Two points are marked with dots and connected to text boxes:

- 1964-1997:** Dr John R and Dr Judith R Caskey-Smith were pioneering lymphologists from Adelaide. Founded the Lymphoedema Assoc of Aust in 1982. Judith developed a method of performing MLD strokes that were simple for self-management.
- 1970:** Professor Albert Leduc started researching the field of physical treatment of lymphoedema. The "Leduc" method of lymphoedema management began in 1994.

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Dr Bruno Chikly graduated from the Medical School of Saint Antoine Hospital in France. He is a man of many talents including osteopathy, the lymphatic system and massage modalities.

2000

2005

Kitai, et al, (2005) in their article "Fluorescence Navigation with Indocyanine Green for Detecting Sentinel Lymph Nodes in Breast Cancer" reported that ICG imaging is a promising technique for further clinical exploration

## Where it all Began

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## Define DLT

DLT = Decongestive Lymphatic Therapy

DLT is the gold standard treatment for managing a client at risk of, or with, lymphoedema

DLT is also recommended as best practice for managing clients with lipoedema

Some components of the DLT technique are beneficial for many other conditions – e.g. pre and post-surgery, fibromyalgia, migraine, sinus congestion

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## Global Terminology

Decongestive Lymphatic Therapy (DLT)	• Current term used in Australia
Complete Decongestive Therapy (CDT)	• Originated in Europe and Australia • More prevalent in the United States
Complete Decongestive Physiotherapy (CDP) or Complex Decongestive Physiotherapy (CDP)	• Pioneered in the United States by Dr Robert Lerner

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### Different Spelling / Abbreviations

Lymphoedema	Lymphedema	LO Australia
LE International	Lipoedema	Lipedema

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### What is Lymphoedema?

“Lymphoedema is a disease regarded as a malfunction of the lymphatic system that presents as swelling in body regions, particularly the limbs”.

(Suami, H., & Scaglioni, M. F., 2018)

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### Sleigh and Manna (2020) describe Lymphoedema as....

“Lymphedema as a chronic disease marked by the increased collection of lymphatic fluid in the body, causing swelling, which can lead to skin and tissue changes. The chronic, progressive accumulation of protein-rich fluid within the interstitium and the fibro-adipose tissue exceeds the capacity of the lymphatic system to transport the fluid. Swelling associated with lymphedema can occur anywhere in the body, including the arms, legs, genitals, face, neck, chest wall, and oral cavity”.

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**What is Lipoedema?**

Lipoedema is a rare painful disorder of adipose tissue. It essentially affects females and is often misdiagnosed as lymphoedema or obesity. It is globally misdiagnosed or underdiagnosed, and the literature is lacking appropriate guidance to assist clinicians towards this diagnosis.

(Shavit, et al., 2018)

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**Decongestive Lymphatic Therapy (DLT)**

There are three phases that make up Gold Standard treatment for Lymphoedema. Each phase consists of:

Discussed in detail in own module

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**PHASE ONE:**

Compression bandaging    MLD    Skin care

**Decongestive Phase**

Exercise    Modify ADLs

**Therapist led**

Patient is seeing you daily

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**PHASE TWO:**

**Transition Phase Patient led**

Intermittent bandaging    Compression garment    MLD

Skin care    Exercise    Modify ADLs

Patient will see you regularly

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**PHASE THREE:**

**Maintenance Phase Patient led**

Intermittent bandaging    Compression garment    MLD    Skin care

Exercise    Modify ADLs    Adjunctive Tx

Patient does not need to see you regularly, they may wish to, but they may just see you every couple of months

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