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Napier City Massage Therapy

Napier

Friday, June 9, 2017

(Room 11)

11:00 - 11:55 WS#31: Recognising and Treating Lymphoedema and Lipoedema

12:05 - 13:00 WS#39: Recognising and Treating Lymphoedema and Lipoedema (Repeated)

Recognising and Treating Lymphoedema and Lipoedema

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Dip in Massage & Clinical Sports Therapy
Vodder Certified Lymphoedema Therapist
OMT

Lymphoedema

- A chronic condition caused by dysfunction of or damage to the lymphatic system.
- Tissues accumulate protein-rich fluid
- Protein overload contributes to
  - severe skin changes and fibrosis
  - pain and discomfort
  - susceptibility to infection

Signs of lymphoedema

- Gradual swelling of the affected limb.
  - Rare for several limbs to be affected.
- Area may feel heavy or taut
- Skin may pit initially
- Skin folds at the joints become more pronounced, knuckles etc lose definition.
- Positive "Stemmer's Sign", as skin and tissue becomes hard and fibrotic.

Stages of Lymphoedema

- Stage 0 – Subclinical stage
  - Lymphatic vessels sustain damage
  - Oedema is not visible or palpable

- Stage 1 – Reversible stage
  - Soft
  - Appears during the day.
  - Elevation can reduce/completely remove swelling
  - "Pitting"
  - Treatment is most effective if started at this stage.

Stages of Lymphoedema

- Stage 2 – Spontaneously irreversible stage
  - Swelling does not reduce with rest and elevation.
  - Skin can begin to harden and become fibrotic
  - Little or no pitting.

- Stage 3 – Lymphostatic elephantiasis
  - Swelling becomes severe and fibrotic
  - Dramatic skin changes
  - High risk of infection
  - Reduced mobility contributes to poor healing rates

Complications/Side Effects

- Fibrosis
- Inflammation
- Fungal infections
- Bacterial infections/Cellulitis
- Lymphocyst
- Lymph fistula
- Papillomatosis
- Lymphocele
- Secondary tumours or relapses
- Angiosarcoma
- Loss of mobility and independence

Primary Lymphoedema

- Congenital
- Anatomical root causes:
  - Hypoplasia – not enough lymph vessels
  - Hyperplasia – too many lymph vessels, become rigid and valves can't function
  - Aplasia –lymphatic vessels and/or nodes missing
  - Lymphangiectasia – dilated lymph vessels

Primary Lymphoedema

- More common in the lower body,
- Onset usually triggered by an event
  - Reduced exercise
  - Puberty
  - Inflammation
  - Weight gain
  - Psychological or physical stress/injury

Types of Primary LO

- Spontaneous – accounts for approx. 96% of PLO.
  - No genetic history
- Hereditary – Approximately 4% of PLO.
  - Genetic cause is known
    - Includes:
      - Nonne-Milroys: present at birth
      - Meige's Disease: presents in childhood or around puberty

Onset Classifications

- Congenital – at birth
- Juvenile – during childhood
- Praecox - before age 35
- Tarda - after age 35
  - most common cause is tumour growth, so this must be ruled out before treating.

PLO also accompanies other conditions, including

- Kippel-Trenaunay Syndrome
- Noonan Syndrome
- Ulrich Turner Syndrome
- Gorham Stout Syndrome

Secondary Lymphoedema

Caused by damage or trauma to the lymphatic system.

- Filariasis infection
- Post op or post trauma, esp lymph node dissection, breast and gynae cancer procedures
- Post infection
- Post inflammation
- Malignant Lymphoedema: tumour growth restricting lymph flow.
- Artificial lymphedema: self harm.

Medication-induced Oedema

- Sodium overload/retention,
  - medications with high levels of sodium and sodium bicarbonate (eg antibiotics)
- Exacerbation of pre existing renal dysfunction
  - NSAIDs, anti-hypertensives, and anticancer drugs will be likely to induce oedema in patients with renal dysfunction.
- Increasing vascular permeability
  - Calcium antagonists, insulin etc contribute to hyper-permeability.

Diagnosis

- Thorough medical history
- Examination

Medical history

- Duration and course of oedema
- Family history (esp. for PLO)
- Triggers/root causes for oedema
- Complaints associated with oedema
- Any previous treatment and outcomes
- Current therapy
- Presence of oedema complications
- Current medications

Examination

- Unilateral or bilateral swelling
- Pitting
- Presence of fibrosis (Stemmer's sign)
- Colour
- Skin changes
- Vascular pattern – rule out other disorders. EG Chronic Venous Insufficiency, or tumour growth
- Scarring – can block lymphatic flow
- Areas of radiation

Technical Diagnostics

- Can be used to support diagnoses
  - Lymph scintigraphy.
    - Very effective, but expensive and unpleasant for the patient
  - Ultrasound
    - ideal for looking at larger structures, but usually inadequate for looking at small sized lymphatic vessels.
    - Used for tumour follow up and documenting skin fibroses.
  - MRI or CT can be used but aren't considered to be cost effective, except in specific range of indications.

Medication

No guidelines for lymphological disorders

- Some medications are being used, but their efficacy is unclear
  - Wobenzym – for antiphlogistic and fibrinolytic effect
  - Escin – vascular repair and analgesic effect
  - Venosin (extract of horse chestnut) – anti-oedema effect
  - Lymphdiaral – homeopathic remedy


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Treatment

Combined Decongestive Therapy,
by a qualified Lymphoedema Therapist

- Manual Lymphatic Drainage (MLD)
- Compression
- Exercise
- Skincare

Compression

- Bandaging following MLD treatment or
- Compression garments worn daily once oedema is reduced
- Essential for preventing “refilling”
- Takes the place of skins natural elastic recoil
- Additional resistance with muscle movements

Exercise

- Muscle and joint movements improve passive lymph movement
- Raises the heart rate and arterial pulsations
- Improves de/oxygenation within the blood
- Affects breathing patterns, influencing the flow of lymph.

Exercise

- Garments should be worn while exercising
- Water exercises, rhythmic exercises such as Nordic walking, cycling
- Simple and achievable programmes to maintain compliance.
- Respiratory therapy and meditation exercises.

Skin care

Lymphoedema stretches the skin

- upsets the elastic fibres
- alters the acid mantle.
- Bandaging and compression can absorb moisture and oil.

Use pH neutral, alcohol/perfume free cream regularly on the skin.

- Remove garment before bed and moisturise. (Moisturiser can damage garment fabric)
- Additional benefit of client being in position to observe skin changes

Advice for Oedema Patients

- Take precautions against injuries to the affected area
  - wear gloves when gardening, avoid blood tests/needles, wear insect repellent,
  - Disinfect even minor injuries.
- Do not wear tight fitting clothing/jewellery
- Avoid over-exertion/heavy lifting/repetitive activities
- Exercise regularly
- Maintain healthy body weight
- Wear garments when flying and for 1 day after flight.
- Avoid heat

Advice also applies to patients at risk of developing LO but currently asymptomatic.

Other therapeutic options

- **Kinesiotape**
  - Supports therapy in areas that are difficult to bandage or wear a garment, eg trunk, face & neck
  - Can be worn for up to seven days before removing.
  - Tape is soft, flexible and waterproof

Other therapeutic options

- Intermittent Pneumatic Compression (IPC)
  - Effective for phleboedema, lipoedema, PLO, SLO without proximal occlusion
  - Regular applications can reduce number and frequency of MLD treatments required.
  - Contraindications
    - Malignant oedema
    - Genital oedema
    - Ischemic oedema
    - Cardiogenic oedema
    - Central fibrosis
    - Wounds
    - Inflammation
    - Acute thrombosis

Other therapeutic options

Deep Oscillation Electrotherapy/Low-Level Laser Therapy

- Helps to soften hardened fibroses
- May promote nerve and lymph vessel regeneration

Diet

- Maintaining a healthy body weight, with low salt intake is recommended
- LO does not respond to a low protein diet

Other therapeutic options

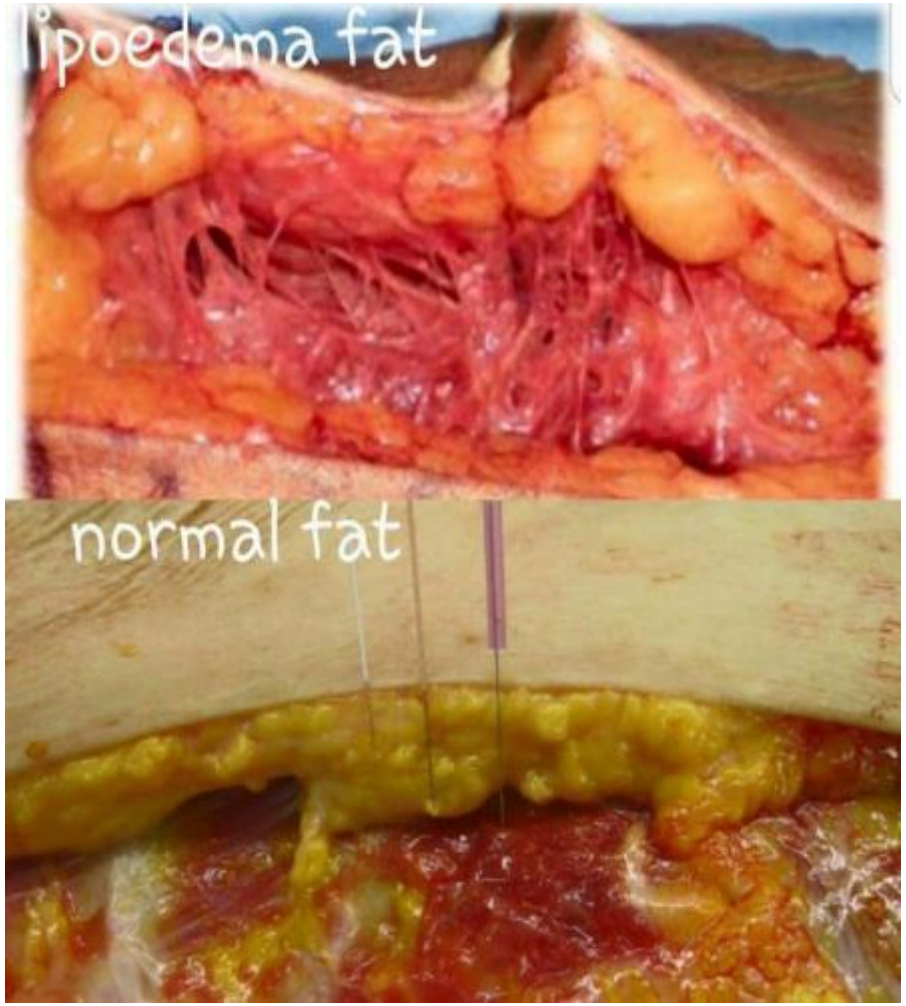
Surgery

- Removal of lymphangioma
- Lymph vessel transplant
- Lymph node transplant
- Lymphatic vessel anastomosis
- Debulking surgery
- Liposuction

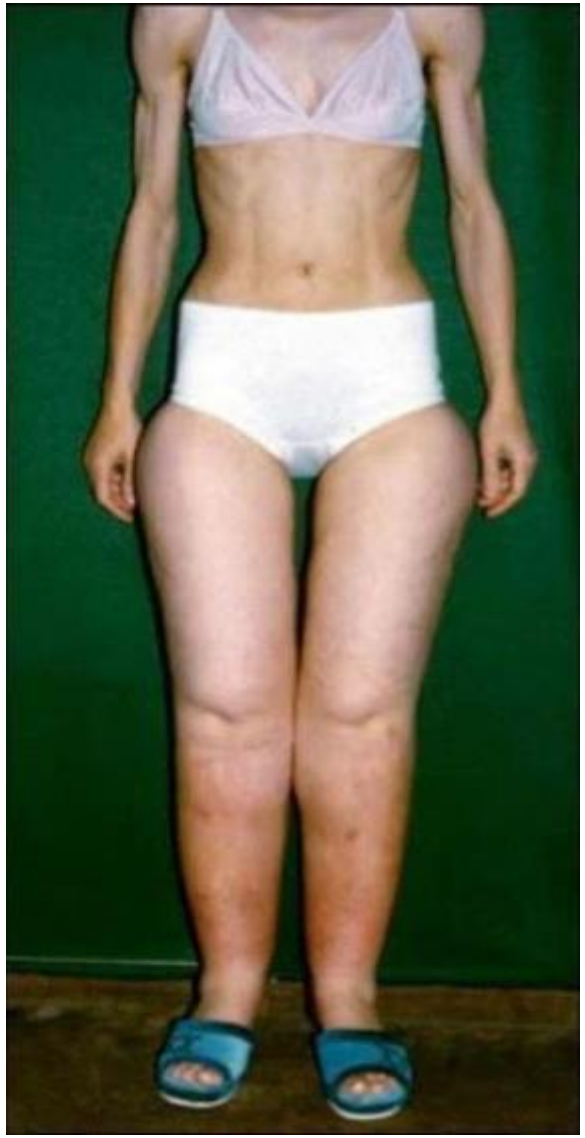
Lipoedema

- Congenital condition
- Characterized by increased abnormal adipose tissue in the arms or legs.
- Torso is normal relative to the limbs.
- Hands/feet are usually unaffected.
- Affects women almost exclusively
- Painful, sensitive to touch
- Bruises easily.

- Adipocytes are enlarged
- Adipose tissues different to normal fat cells



- Does not reduce with diet control, exercise or weight loss surgery
- Often confused with obesity.
- Sufferers frequently feel blamed and shamed by their health professional



Diagnosing Lipoedema

- Client history and examination
- No biological markers or diagnostic tests
- Often mis-diagnosed as obesity or lymphoedema
- Progression is variable and unpredictable
- Can be exacerbated by hormonal changes.

Stages


STAGE 1
Skin looks normal, but a spongy consistency is felt when touched.
STAGE 2
Large fat deposits with indentations begin to form on the legs, especially around the knees and ankles.
STAGE 3
Fat deposits on the legs are bulky, hanging over the hips, knees, and ankles. Legs feel stiff and fat beneath the skin feels harder and more fibrous.
STAGE 4
Fat deposits are so large and extreme that the entire lymph system is affected, leading to severe swelling, protruding growths, and even leaking from the skin.

Lipoedema

- Left untreated, it can damage the lymphatic vessels
  - Lipophleboedema – visible haemosiderin deposits and varicose veins
  - Lipolymphoedema – tissues in distal portion of affected limbs hardens increasingly and feet/hands also become oedematous.
  - Lipolymphophleboedema – combination of all 3 types of oedema.

Treating Lipoedema

- Managed with CDT
- Surgical interventions may be appropriate: Tumescent Liposuction and skin debulking, performed by specialist plastic surgeons only.
- Ketogenic and LCHF diets.
  - Strong anecdotal evidence suggests it reduces pain, inflammation and promotes weight loss in Lippy patients.
  - Supported by Dr Karen Herbst, Endocrinologist and leading Lipoedema researcher.

Lymphoedema vs Lipoedema

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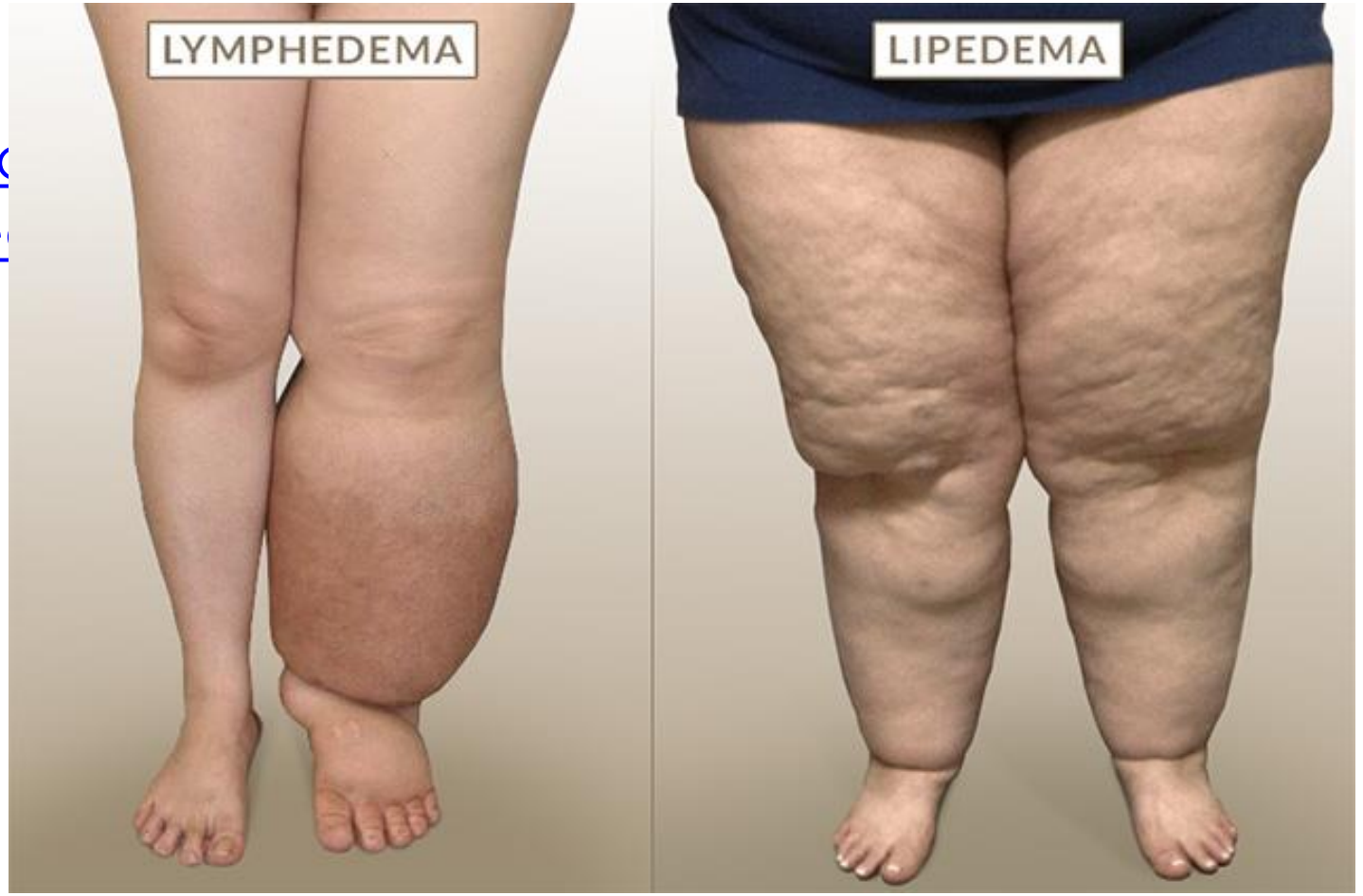

Lipoedema vs Lymphoedema

Lipoedema	Lymphoedema
Symmetrical, bilateral swelling of the lower limbs (less often, arms)	Swelling usually unsymmetrical, can be unilateral
Usually soft, loose connective tissue and fat, "marbles"	Skin can become hardened
Feet (or hands) usually unaffected ("harem pants")	Feet/hands affected
No pitting	Pitting, especially in early stages
Joint pain, particularly in knees	
Tissue tenderness	Pain free, but sensation of tightness

Lipoedema vs Lymphoedema

Lipoedema	Lymphoedema
Easy bruising	Doesn't bruise easily
Infection risk normal	High risk of infection (cellulitis) in affected areas
Only affects women	Affects both men and women
Weight loss has little or no impact	Weight loss usually has a beneficial effect
	Affected skin can develop other features, such as papillomatosis
Usually a family history	Family history less likely

Barriers to Treatment for Patients with Lymph- or Lipoedema

- Physician support
- Physician and patient education
- Cost
- Patient Compliance
- Access to services
- Mobility

Finding a Therapist

- https://www.lymphoedema.org.au/the-register/find-a-practitioner/
- https://www.vodderschool.com/contacts/therapist
- http://www.lymphoedemanz.org.nz/Lymphoedema+Therapists/Finding+a+Lymphoedema+Therapist.html

Take Home Points

- Lymphoedema and Lipoedema are different conditions
- Both are chronic conditions that require regular management
- Without management, both conditions can cause disability
- Diuretics are not appropriate for removing lymph, and can cause additional problems
- Telling the patient to lose weight may cause additional harm, both physically and psychologically.

Links

- MLD being performed under fluorescence imaging
  - https://youtu.be/YmwC0A3PWhM
- http://www.lymphoedemanz.org.nz/For+Professionals.html
- http://fatdisorders.org/fat-disorders/lipedema-lipoedema-description
- http://www.lipomadoc.org/

Register your interest ASAP to secure a location near you!

Lymphatic and Venous Symposium 2017

with **Dr R Damstra, MD PhD NiJ Smellinghe Hospital, Holland**
Dermatology, Phlebology and Lympho-Vascular medicine

Presenters:

Dr Robert Damstra
Ad Hendrickx - Physical Therapist Nij Smellinghe Hospital, Holland
Els Brouwer - medi Education and Product Specialist - Europe, Asia, Australia & New Zealand

Agenda:

0830: Registration - No registration fee to attend
0915: Welcome and Introduction

0930 - 1300:
From (venous) oedema to lymphoedema; and everything in-between *(Dr Robert Damstra)*
The world of compression in oedema therapy *(Els Brouwer)*
Oncology; skin cancer *(Dr Robert Damstra)*

1300: Lunch will be provided

1400 - 1700:
Lipoedema, Lipo-lymphoedema or obesity? *(Dr Robert Damstra)*
The psychological impact in lipoedema and/or obesity *(Ad Hendrickx)*
Self management in lip and lymphoedema - exercise, compression, psychological obstructions and dieting *(Ad Hendrickx and Els Brouwer)*

1700: End

Where and When:

Auckland - Thursday 28th September 2017 Venue to be confirmed
Wellington - Friday 29th September 2017 Venue to be confirmed
Christchurch - Monday 2nd October 2017. Venue to be confirmed

Please register your interest NOW with your area representative listed below.

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