JCN LIVE 2020

Journal of Community Nursing JCN

SESSION FOUR: USING BEST PRACTICE TO MANAGE CHRONIC OEDEMA

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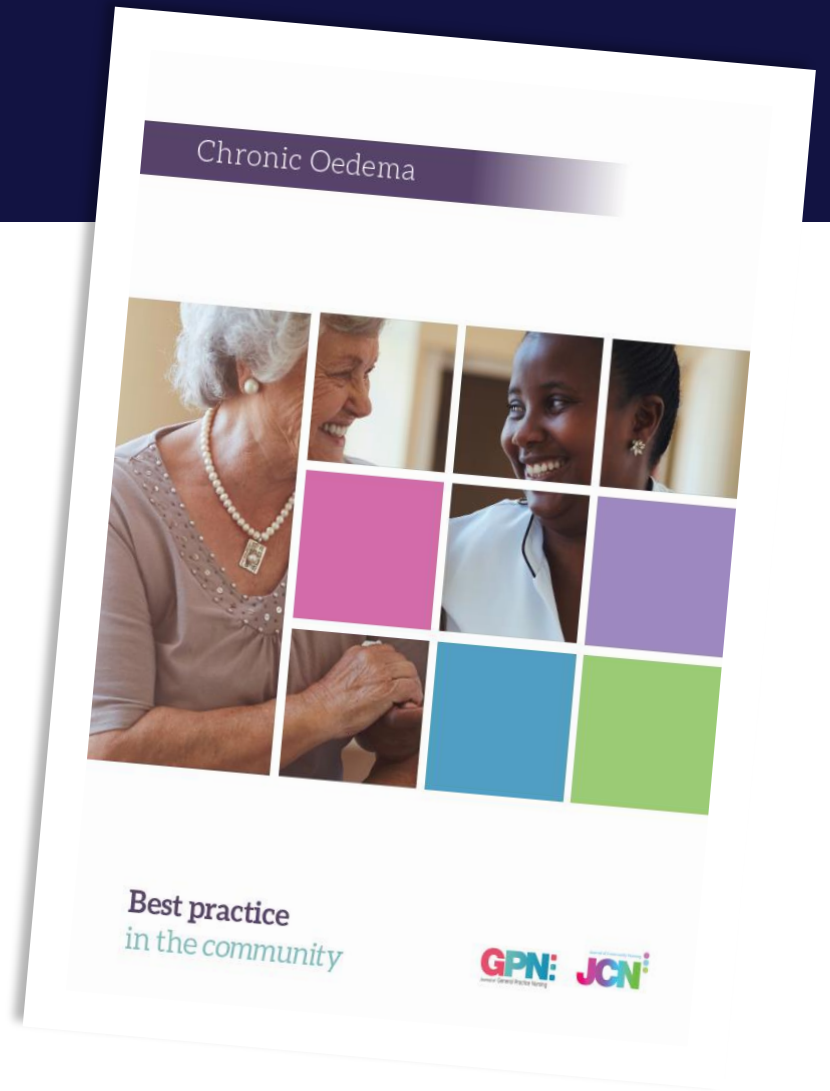
Learning objectives

- To highlight the under-estimated prevalence of chronic oedema hidden within your workload
- To understand why and how chronic oedema develops
- To understand how using best practice will ensure that this patient group is assessed and treated appropriately
- To understand when and where compression should be applied, as below knee is not always enough
- To understand compression garment selection and measurement

Chronic oedema best practice statement

Introducing the Best practice in the community: chronic oedema.



Using evidence-based research to support clinicians working in primary care to effectively identify, assess and manage patients with chronic oedema (Wound Care People, 2019).

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Chronic oedema

Broad term used to describe oedema that:

- Has been present for three months or more
- Does not respond to diuretics
- Commonly affects one or more limbs, but also adjacent areas, such as trunk, breast, head, neck or genitalia

An increasing problem for UK health services

- Chronic oedema is a progressive and debilitating condition that requires long-term management
- The prevalence of chronic oedema is currently equal to, or greater than, that of other long-term conditions, such as stroke
- The number of people with chronic oedema is set to increase as the older population, and associated polymorbidity, grows over the coming years

What is the prevalence?

3.99 in 1000

Over 85 years: 12 in 1000

52-69% of patients in community

73% had leg ulceration

By 2039, 3.5 million over 85 years

(Moffatt et al, 2017; 2019)

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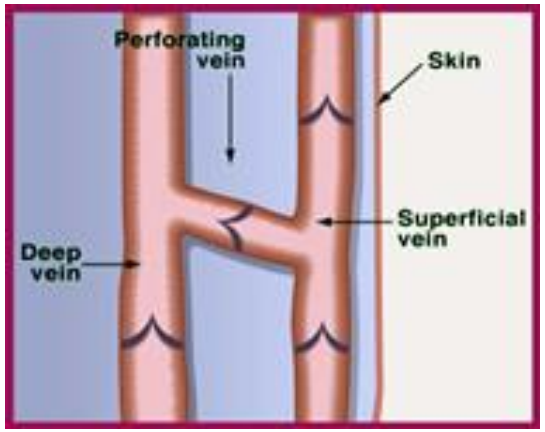
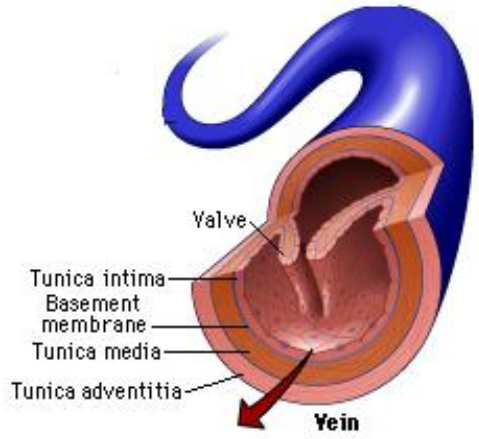
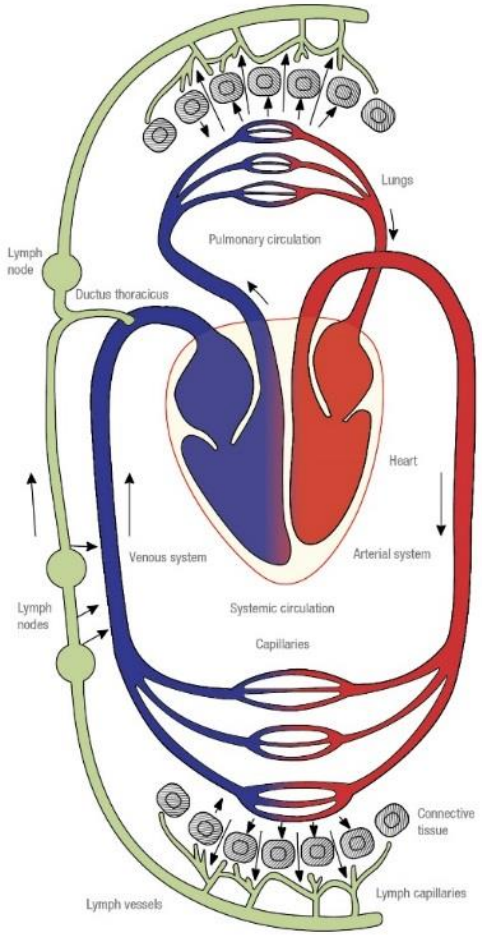
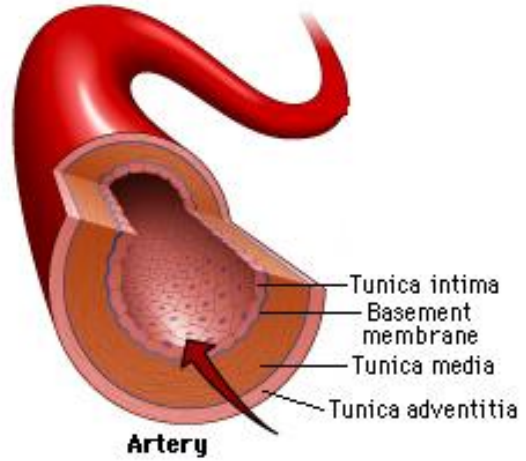
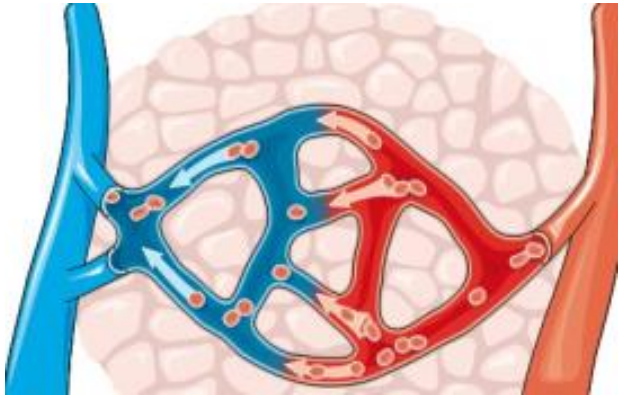
Anatomy and physiology: vascular system



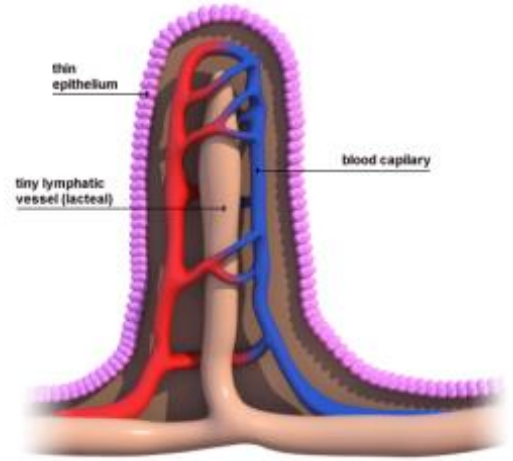


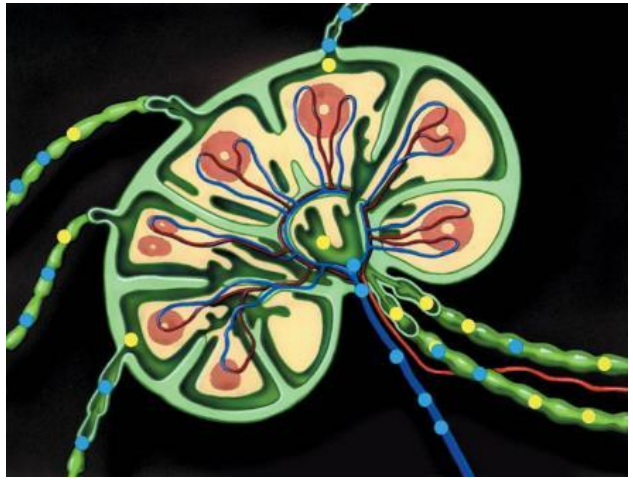


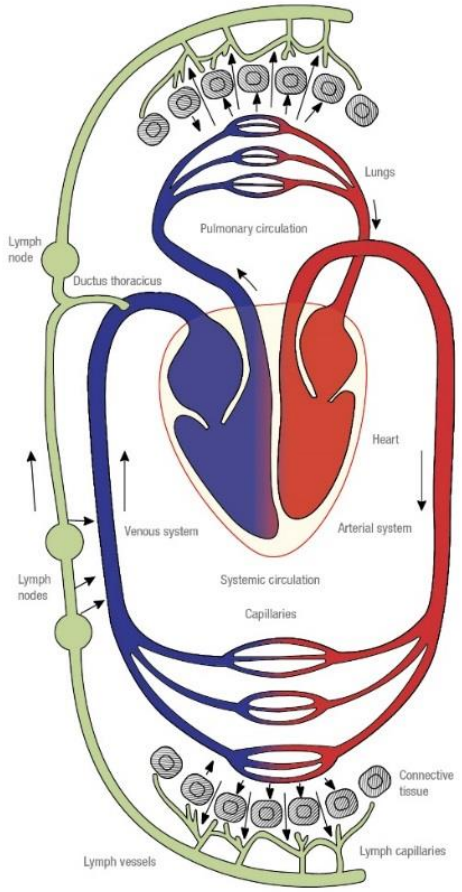


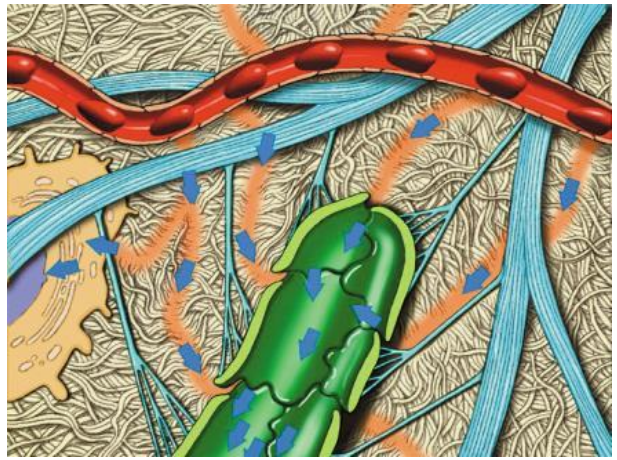


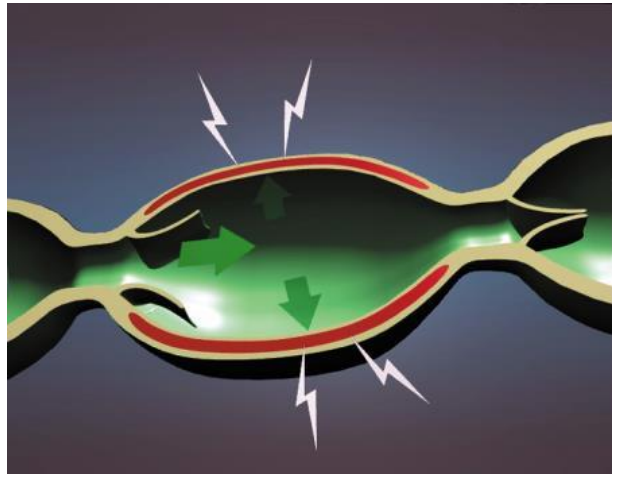
Anatomy and physiology: lymphatic system





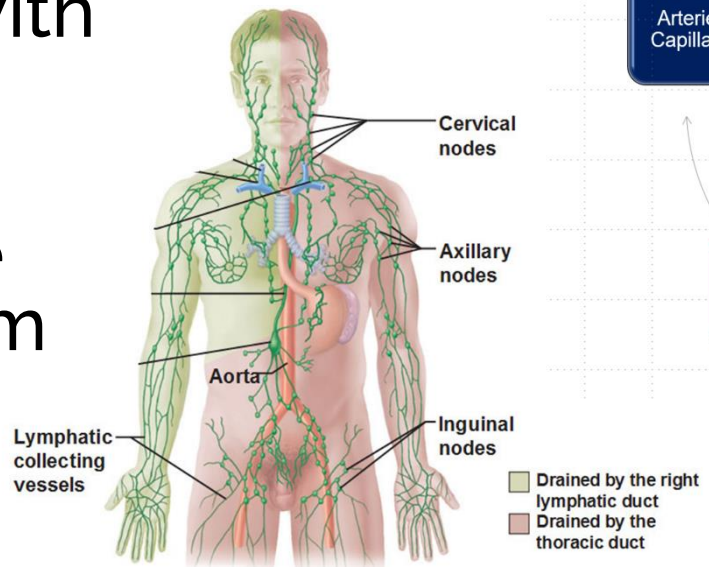




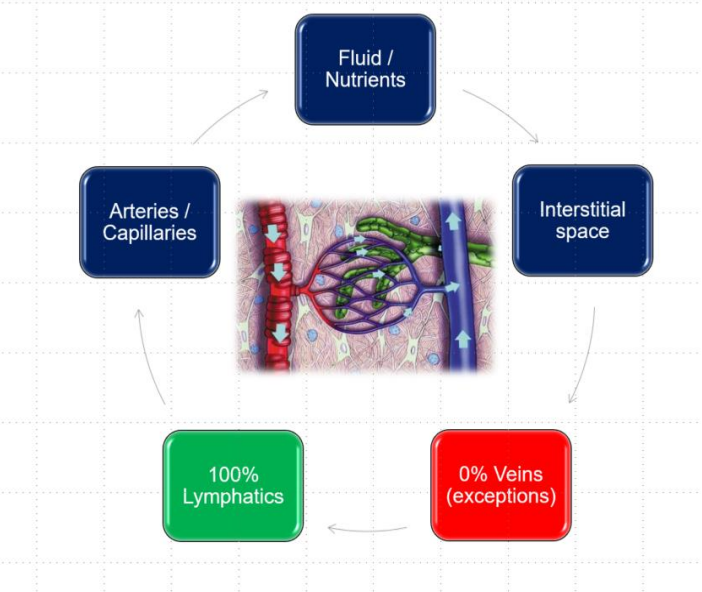


The lymphatic system

- Resembles a river flowing from the source, through streams and tributaries, then out to sea
- Is very closely intertwined with the circulatory system
- Makes cells called lymphocytes which help the body fight infection, and form part of the body's defence mechanism



Fluid exchange



Causes of chronic oedema

- Dependency
- Heart failure
- Venous oedema
- Obesity
- Advanced cancer
- Renal failure
- Trauma/surgery
- Infection

Principles of assessment using best practice

- Assessment is crucial to identify the underlying cause(s) of chronic oedema so that they can be addressed where possible
- Assessment can be approached using six S's:

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Story

1. Story

- It is essential to obtain the patient's background 'story' or history in order to identify the possible cause(s) of chronic oedema
- Thorough history-taking can help to identify the known risk factors for the development of chronic oedema, including underlying medical conditions, medication or lifestyle choices
- Where possible, contributing issues should be addressed or the management optimised to ensure that any care plan is successful

Self-care

- For patients with chronic oedema, it is crucial, where possible, that they engage in their care to better improve the capacity to live well over time
- The self-management of long-term conditions is also a key component of *The NHS Long Term Plan* (NHS, 2019) to improve efficiency, and free up valuable resources
- Remember, self-management is not abandoning the patient to care for themselves and support should be available if needed

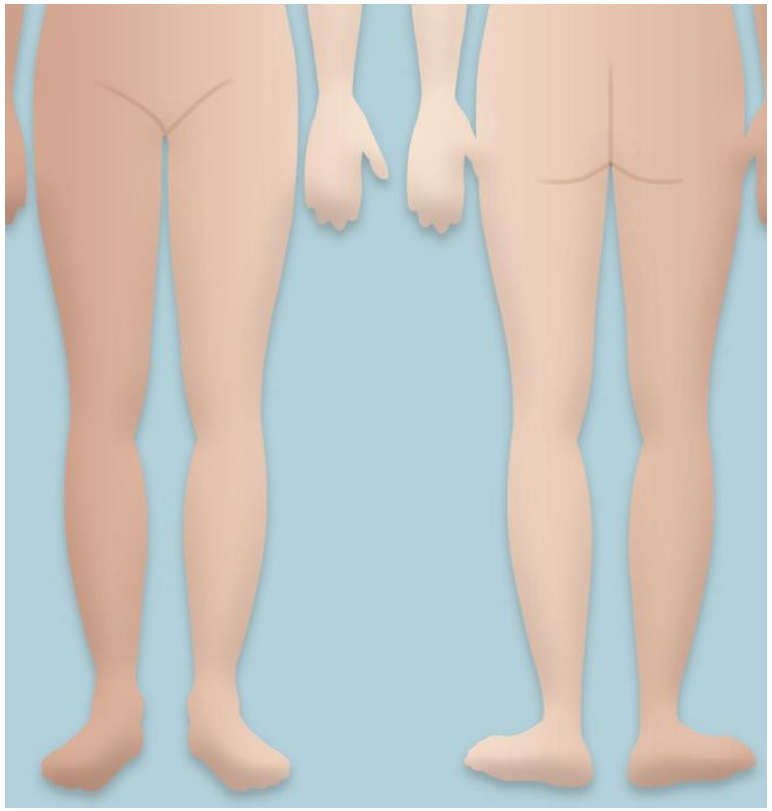
Self-care

- Self-care is a dynamic and empowering method of long-term management. However, to engage with their own care, the patient must be:
  - Willing
  - Health literate
  - Central to decision-making
  - Central to care delivery
- Even more important now due to Covid-19

Site

3.
Site

- The location of chronic oedema gives clues to the possible underlying causes and informs where compression should be applied
- Identify the full extent of the swelling; failure to examine the limb fully can create problems with management
- Remember the limb starts at the groin and ends at the feet



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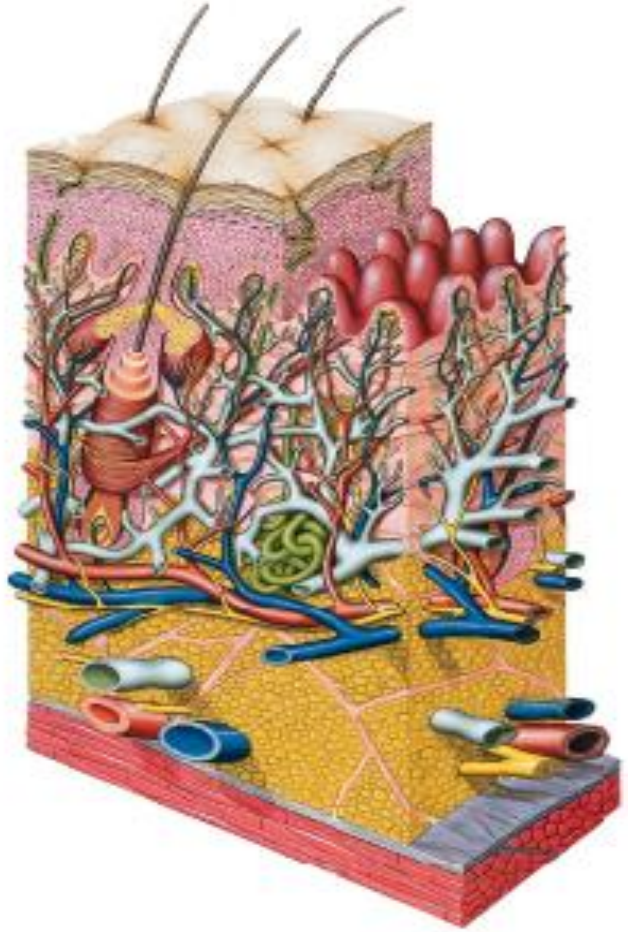
Site

3.
Site

- Both lower limbs should be examined for the presence of oedema and compared to each other
- Assessment of the site should include:
  - Is the swelling acute or chronic?
  - Does the swelling affect one limb (unilateral) or both (bilateral)?
  - Is swelling localised or more generalised?

Skin

- Chronic oedema can have a detrimental effect on the skin
- Failure of the lymphatics to clear fluid from the tissues can lead to the accumulation of waste products and a lack of nutrients to the area. With time, the skin undergoes changes and can thicken and harden as a result
- The skin in patients with chronic oedema is vulnerable to damage and may breakdown and/or become infected



Skin

The following should be noted while assessing the skin:

Pigmentation

Cellulitis

Leaking of lymph (lymphorrhoea)

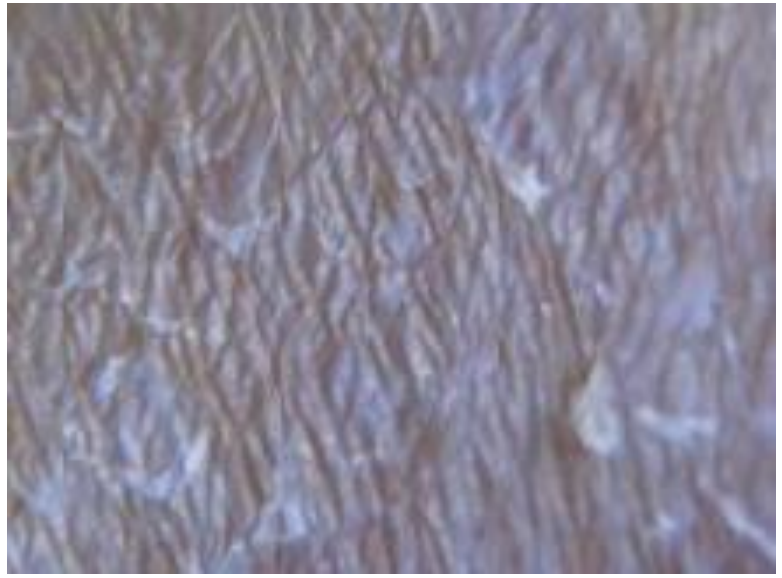
Hyperkeratosis

Wounds present

Skin

The following should be noted while assessing the skin:

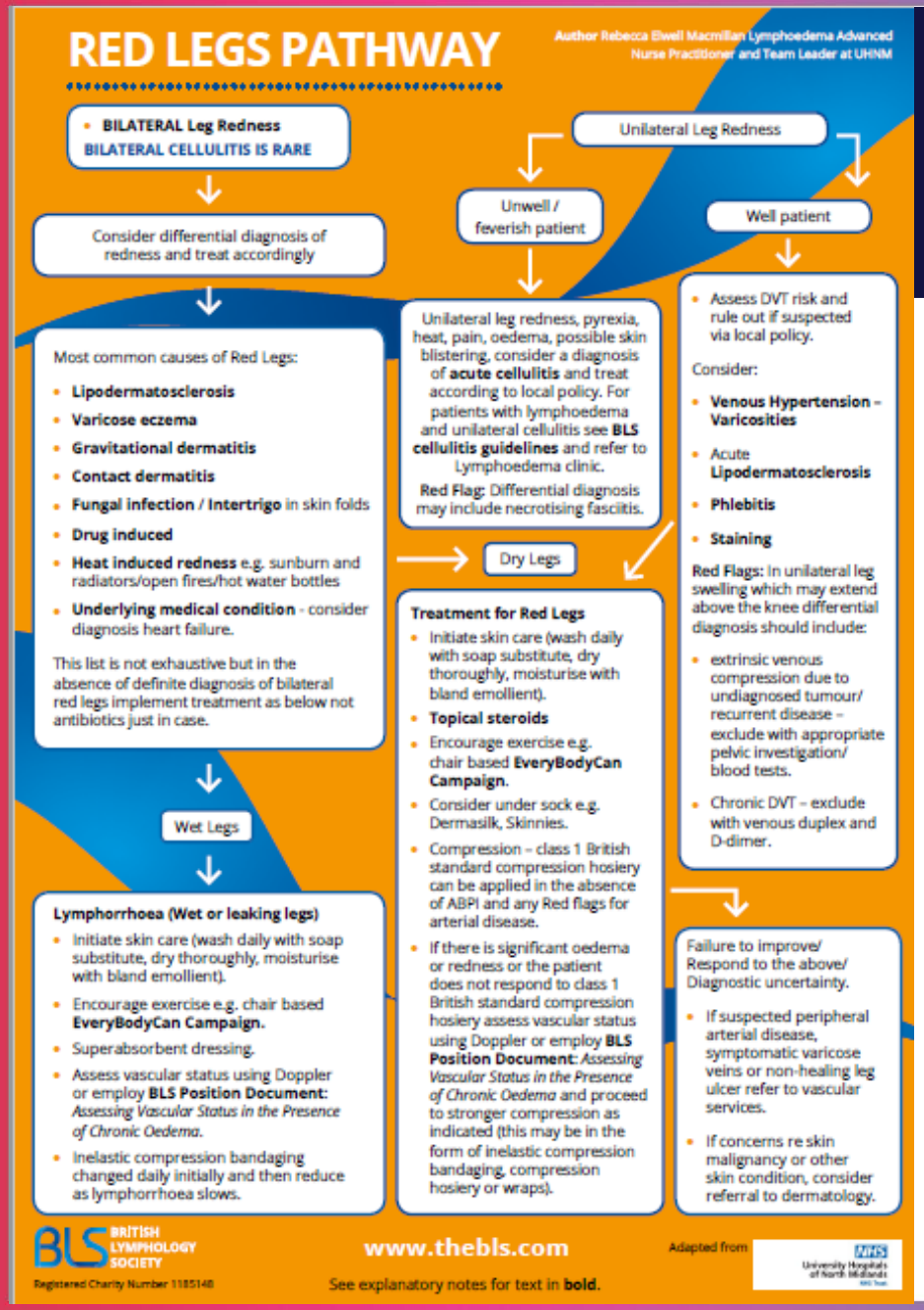
Fungal infections



Dryness

Other considerations

- Sensitivities to topical treatment
- Colour/
- circulation of the skin
- General appearance of the skin



Red Legs Pathway

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Launched at BLS virtual conference 2020 and now available at: www.thebls.com

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Size

5.
Size

- The size of the limb should be evaluated at initial assessment to obtain a baseline set of measurements to refer to throughout the patient's journey to chart their progress
- Simple measurements taken from set points above the malleolus, mid-calf and at mid-thigh can be enough to assess progress with treatment
- The size of the limb can influence compression choice and can indicate the need for intensive therapy to reduce swelling before maintenance therapy

Size

An increase in limb size may indicate the need for a period of intensive therapy in order to reduce limb volume.




Shape

6.
Shape

It is important to note the shape of the patient's limb as it will influence product choice when selecting compression therapy for the management of chronic oedema.

Are the toes affected?

Does swelling extend to the feet/foot?

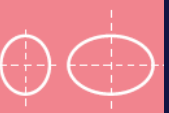
Regular or irregular shape? e.g. inverted bottle shape

Does swelling extend to the thigh(s)?

Are skin folds present?

Shape

6.
Shape



- Poor or irregular shape, or the presence of skin folds may need padding to restore a regular limb shape for graduated compression to be applied
- If swelling extends into the feet and toes, compression will need to be applied to these areas too. Toe bandaging or toe caps will be required

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Compression: where?

- Always consider if compression is required above the knee and also into the feet
- We traditionally only compress between ankle and knee and this can sometimes cause further complications

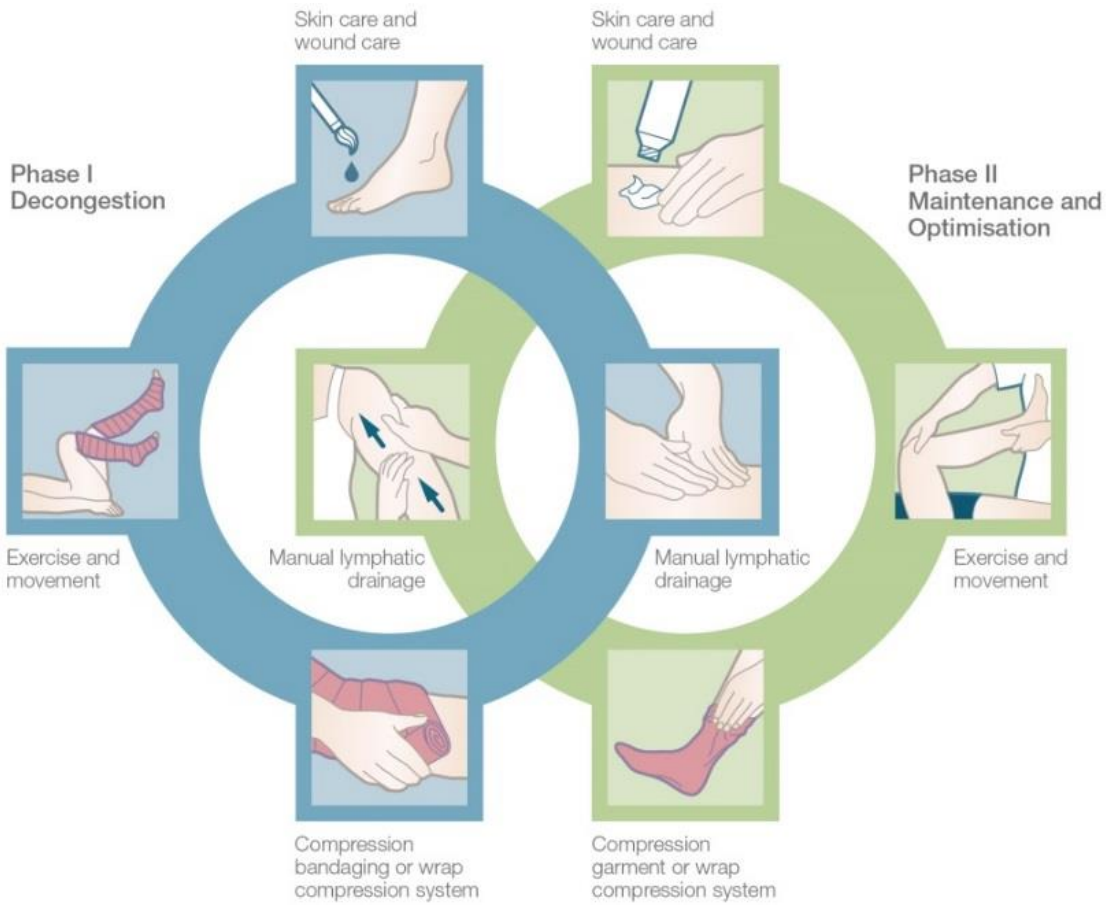
Management: principles of care

Phase 1 — intensive:

- Intensive treatment to improve the condition and to educate patient
- Multi-layer lymphoedema bandaging (MLLB)

Phase 2 — maintenance:

- Aim to maintain oedema reduction and to ensure that the patient is able to self-manage their condition
- Compression garments



Case study

- 48-year-old female
- Obese but with no other relevant past medical history
- Developed three wounds to her inner left thigh
- Assessment and Doppler was undertaken by the district nurse ambulatory clinic
- Compression bandaging was indicated and the patient was commenced in full therapeutic, toe-to thigh compression bandaging

Case study

Case study

- Discussion took place with the lymphoedema service via secure email
- Measurements were taken and provided by the DN and a compressive thigh wrap was ordered
- Once received, this was found to be easy to fit and comfortable
- Self-management was enabled with ongoing support as needed by the ambulatory clinic

Case study: progress after 3 weeks

- There was an improvement in the patient's quality of life, she was able to work with greater ease and shower daily
- Wound healing was effective with exudate volume reduced requiring less absorbent, smaller dressings

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Case study: progress after six weeks

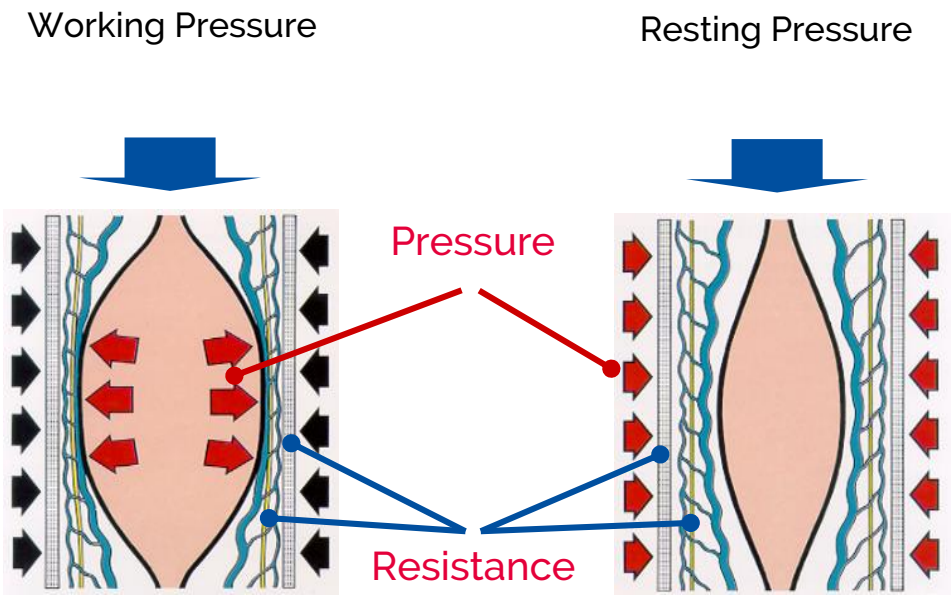
- The smaller wound healed quickly
- The remaining wounds progressed quickly to skin level

Case study: discussion

- Importance of patient choice — preferred not to wear liner or stockinette under the wrap as she stated the wrap is more comfortable without
- Due to the excellent knowledge and skills of the district nurse, the patient was fully healed within three months
- The patient started in full leg compression then reduced to thigh compression only, which would not be considered best practice
  - Reasons – heat, wound healing, introduction of lifelong compression and no increase in oedema below knee
- Continued chronic oedema management in clinic
- Despite the restrictions of the Covid-19 pandemic, effective joint working and communication can still be achieved and lead to a positive patient outcome and experience

Compression therapy

- Enhances the pumping action of the muscles (high working pressure/low resting pressure)
- Acts as a counterforce, limiting filtration of fluid into the tissues
- Increases the uptake of fluid by the lymphatics
- Reduces formation of excess interstitial fluid
- Due to the graduated effects, directs lymph towards the limb



Selection of compression

- Aim of phase is to help:
  - Reduce the oedematous limb to a more normal acceptable shape and size for the individual
  - Improve venous and lymphatic return (heal any ulceration)
  - Improve skin condition
  - Support and enhance the pumping action of the calf muscle pump
- This is normally achieved by applying:
  - Multi-layer lymphoedema bandaging (short stretch)
  - Wrap compression systems

Successful decongestion

Selection of compression

Aim to:

- Maintain the size and shape of limb following decongestion
- Prevent wound recurrence
- Improve venous and lymphatic return
- Support and enhance the pumping action of the calf muscle pump

Compression garment classification

Class	RAL	British Standard	French	US
Class 1	18–21mmHg	14–17mmHg	10–15mmHg	15–20mmHg
Class 2	23–32mmHg	18–24 mmHg	15–20mmHg	20–30mmHg
Class 3	34–46mmHg	25–35 mmHg	20–36mmHg	30–40mmHg
Class 3 Forte	34–46mmHg	X	X	X
Class 4	49–70mmHg	X	>36mmHg	40+mmHg
Class 4 Super	60–90mmHg	X	X	X

Choosing the right compression

An elastic garment (circular-knit) is like a water balloon.

An elastic garment will always try and revert to its original shape, so any areas with abnormality, skin folds or flexure points can cause pain due to the garment digging in.

An inelastic garment (flat-knit), or one with a higher static stiffness, is like a paper cup.

Measuring the compression

G: Circumference at widest part of upper thigh, below gluteal fold

F: Middle of thigh

E: Middle of patella/back of knee

D: Fibula head (two finger-widths below patella)

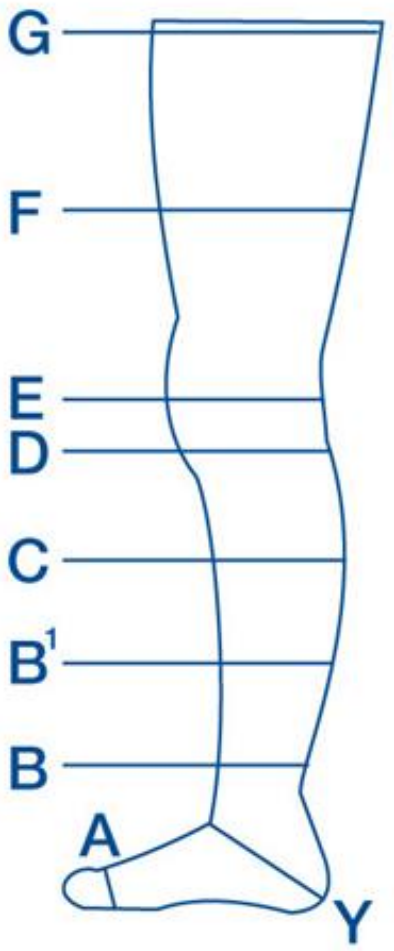
C: Maximum circumference of calf

B^1:Transition to calf (Achilles tendon)

B: Narrowest circumference at ankle

Y: Heel/ankle flex with maximum dorsiflexion

A: Metatarsal joint of toe



Management: what can you do?

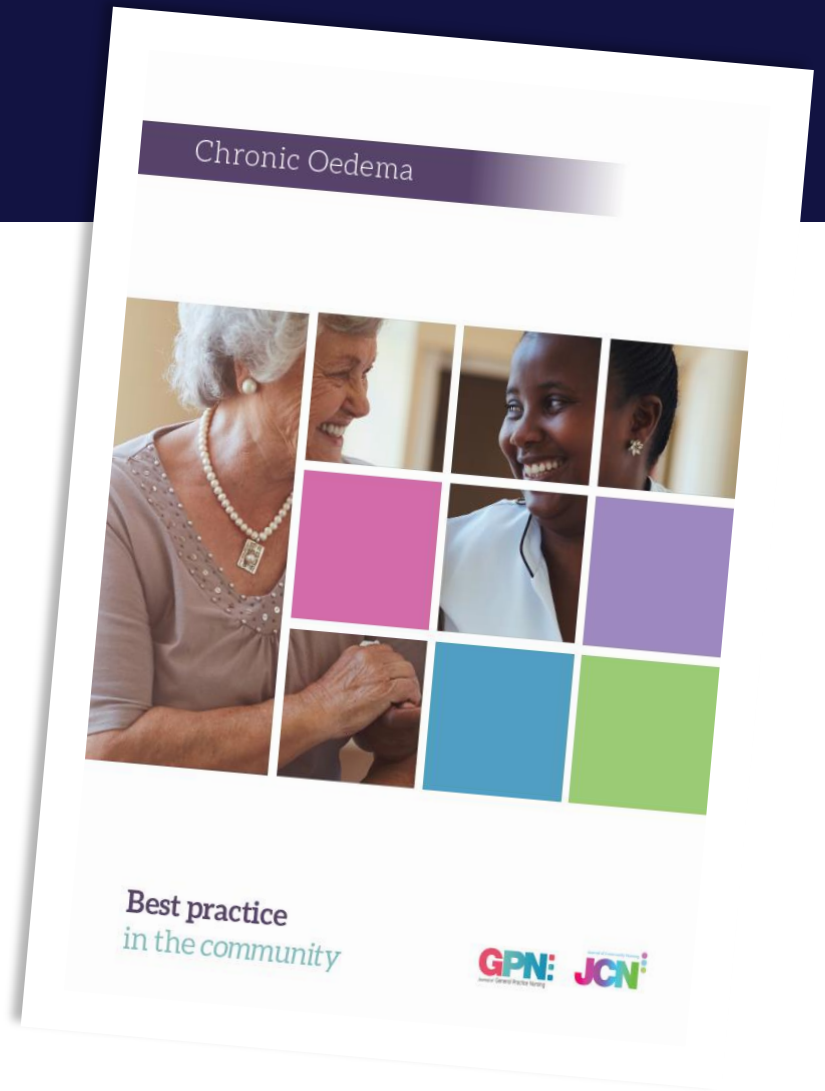
Pharma-cological Management	Skin care	Compression	Exercise	Positioning	Healthy eating	Educate and refer on as necessary
Gabapentin/ pregabalin	Wash, dry	MLLB	Proactive	Bed at night	Healthy body weight	Dermatology
Calcium channel blockers/ Parkinson's medication	Debride	Wraps	Foot, leg exercises	Footstools	Diet if necessary	Vascular
Pain relief	Moisturise/ steroids	Hosiery – MTM, standard	Do in sitting	Comfort	Dietetics involvement	Lymphoedema
Anti histamines	Observe		Walk more		Bariatric surgery	

Summary

The *Best practice in the community: chronic oedema* (Wound care People, 2019) aims to help you achieve clinical outcomes for your patient.

The best practice aims to:

- Ensure that this patient group is assessed appropriately by using the six S's
- Ensure patients are managed effectively and provided the appropriate therapy solution for their condition and lifestyle



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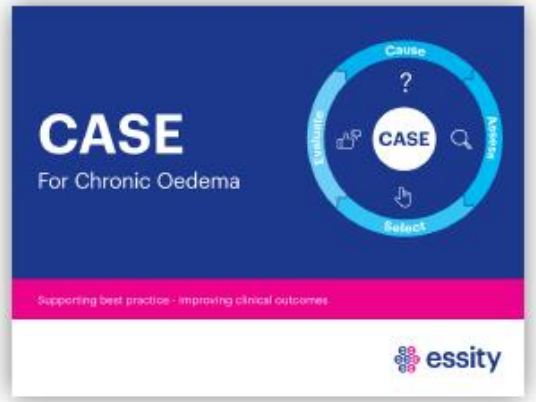
Essity Education

- Free education and training is available via Essity's academies
- 31 modules available, including:
  - Anatomy and physiology of skin
  - Factors affecting wound healing
  - Infection management
  - Litigation and the law and the NHS
  - Leg ulcer management
  - Improving the assessment of wounds

JOBST Support Tools



To support clinicians further new tools have been developed including:

- JOBST step-by-step measuring videos
- JOBST Application videos
- Patient self-care support materials
- JOBST FarrowWrap interactive support document
- JOBST Selection guide
- CASE – for chronic oedema

If you would like further information about the different support tools please contact concierge.service@essity.com or contact your local Essity Account Manager.


EVERY BODY CAN
“Lymphoedema doesn’t stop me getting out and about on my bike every weekend”
#EveryBodyCan
LEGS MATTER!

References

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