



# Nursing Management of Lymphedema in Patients with Breast Cancer

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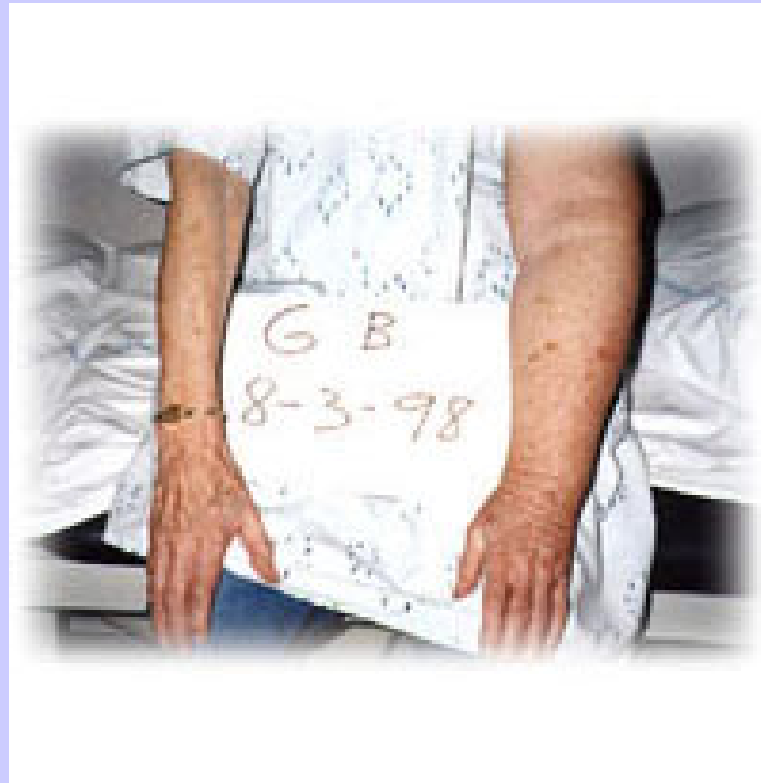
# Definition of Lymphedema in Patients with Breast Cancer

An accumulation of fluid in the subcutaneous tissue of the arm as the result of an interruption of the axillary lymphatic system by surgery or radiation therapy. It causes decreased distensibility of tissue and increased weight of the extremity.

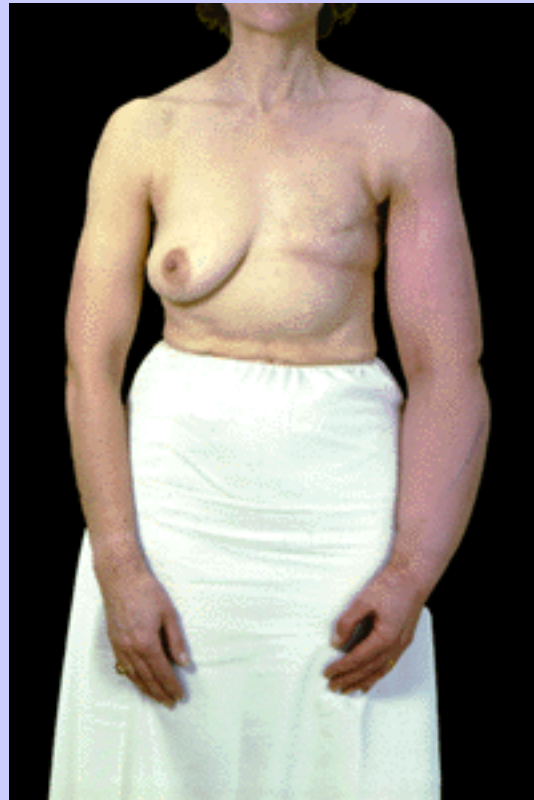
# Incidence of Lymphedema after Breast Cancer Treatment

- Varies widely in the literature depending on how lymphedema is defined, from 6% - 70%
- Sometimes it is transient, more often it is chronic
- Lymphangiosarcoma is an uncommon development, 1/10,000 women

# Typical Presentation



# Post Mastectomy Lymphedema

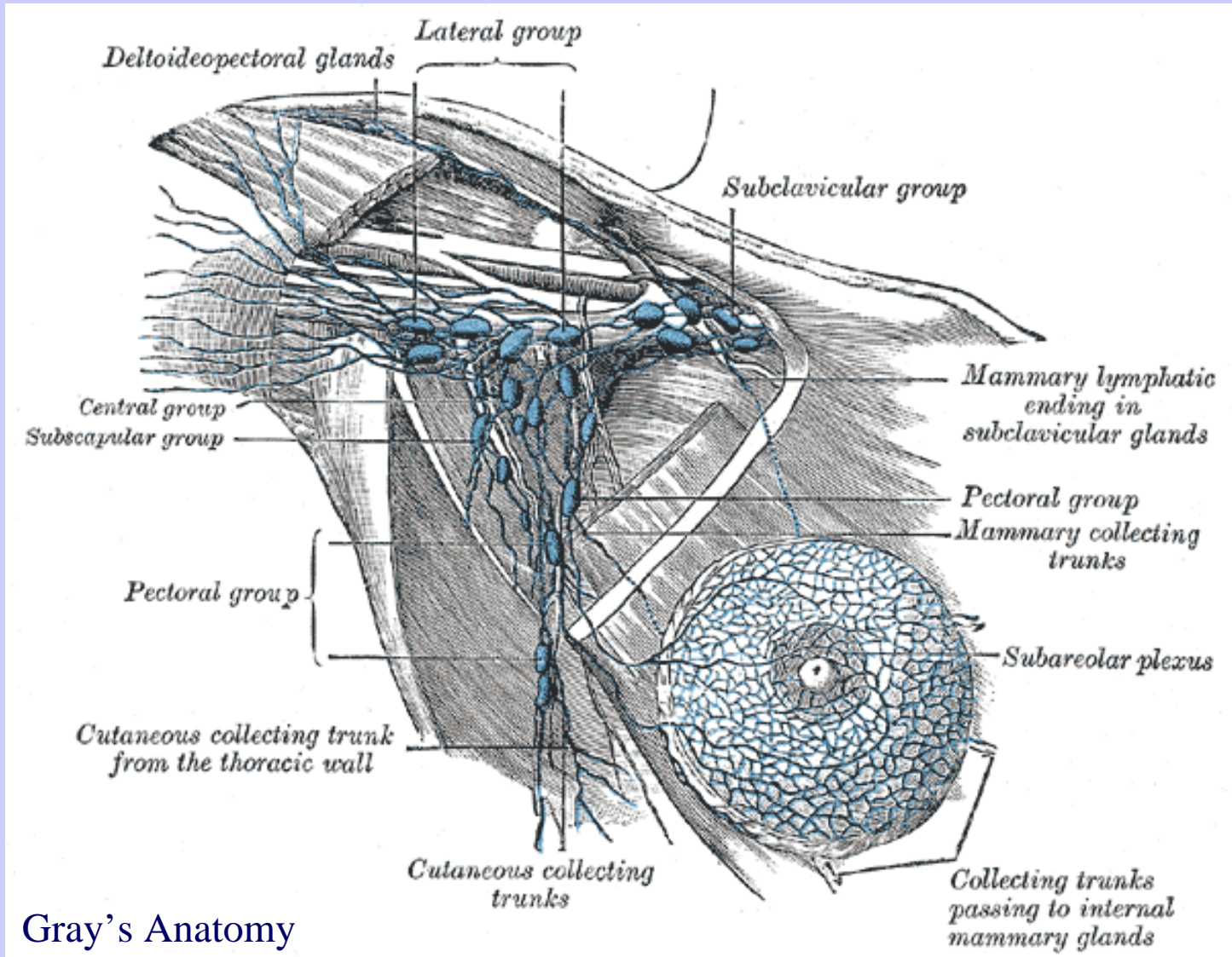


# Anatomy and Pathophysiology

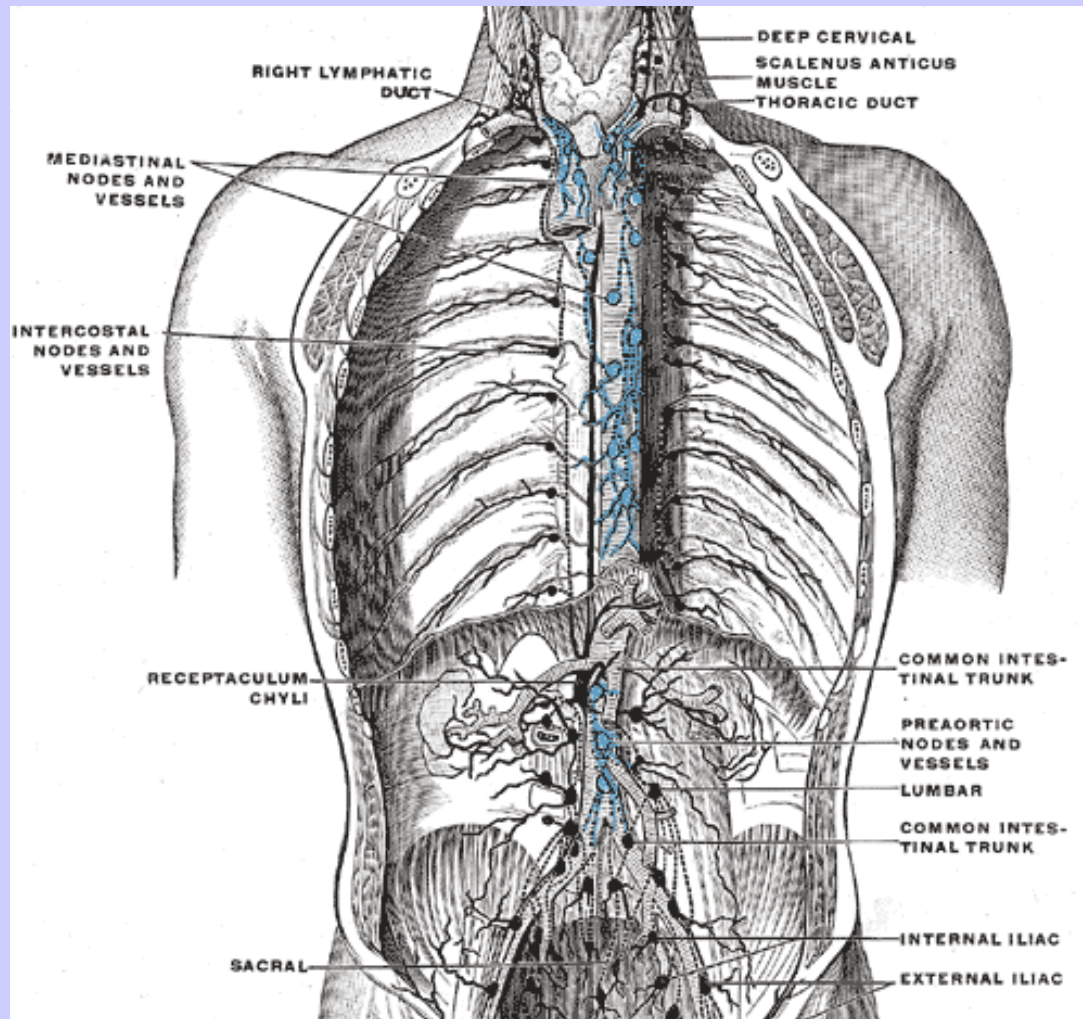


Lymphatic pathways are superficial and deep  
Fluid moves as the result of muscle contraction, pulsation of blood vessels and negative thoracic pressure  
Backflow is prevented by intraluminal valves

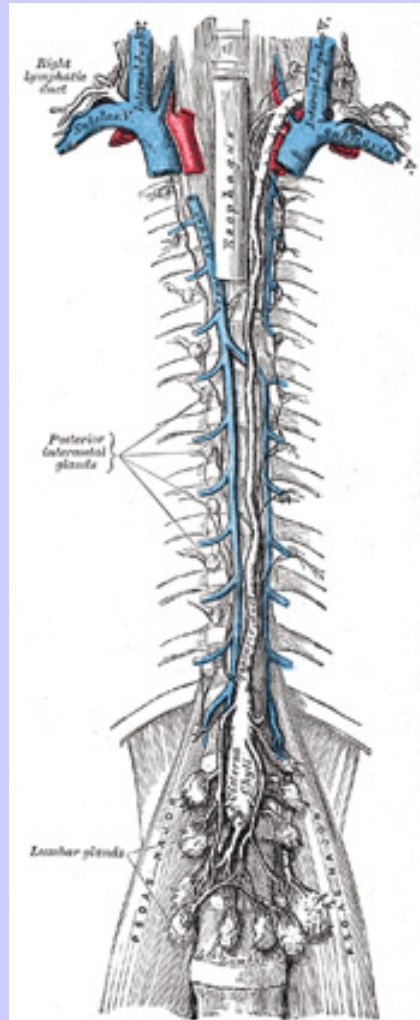
# Lymphatics of the mamma, and the axillary glands



# Deep lymph nodes and vessels of the thorax and abdomen



# Thoracic and Right Lymphatic Ducts



# Risk Factors

- Axillary dissection
- Radiation to the lymph node areas (locoregional radiation)
- Body weight
- Extent of axillary disease
- Cancer recurrence in the axilla

# Morbidity of Lymphedema

- Limited range of motion in the shoulder, arm or hand
- Pain, tingling, numbness and stiffness
- Arm weakness
- Psychological morbidity

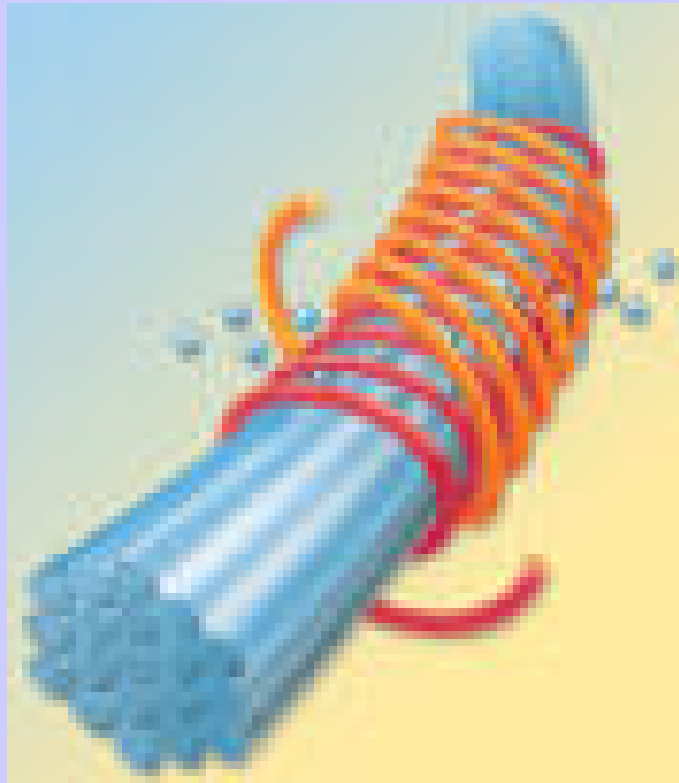
# Assessment

- Rule out axillary recurrence and DVT
- Knowledge of surgery and post op infection
- Physical assessment includes skin colour change, skin trauma, arm weakness, chest wall edema, redness, temp difference, ROM, blistering of the skin & development of collateral circulation across the chest .
- Careful arm measurements

# Interventions

- Few randomized studies to support any interventions with the exception of the compression sleeve, RCTs are weak
- A number of cohort studies to evaluate DLT look promising
- There is no evidence to support the use of pharmacotherapy in the treatment of lymphedema

# Compression, Compression



# Compression Sleeves (CS)



- Deliver a prescribed pressure
- May include a gauntlet
- To be worn at least during waking hours as tolerated
- May also protect from injuries

# Pneumatic Compression (PC)



- One RCT shows a trend in favour of PC
- More studies are needed to see how it compares to a CS
- Time consuming
- Some PT worry about eventual damage to lymphatics

# Decongestive Lymphatic Therapy (DLT)



- Skin Care & exercise
- Gentle pressure stimulates superficial lymphatic flow, start proximal and work distal
- Low stretch bandaging
- Daily for two to four weeks

# Bandaging



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Used in combination  
with DLT

No trials to support the  
use of low stretch  
bandaging on it's own

Often used prior to  
fitting of CS for  
patients with moderate  
lymphedema

# Canadian Guidelines

- A compression sleeve is the only intervention that can be supported by best evidence and should be replaced every 4-6 months
- Patients who choose to use PC must make sure they do not have infection or DVT
- DLT seems to be no more effective than CS

# Guidelines.....

- Treat pain by treating lymphedema, analgesia may also be necessary
- Promote skin care
- Treat skin infections promptly (these are usually streptococcal, Clox 500mg QID for 2 weeks, may need to repeat)
- Use saunas, steam baths and hot tubs with care as heat can exacerbate lymphedema

# Guidelines.....

- Travel with care, especially when visiting warm climates or traveling by plane
- Exercise is encouraged
- Maintain ideal body weight, obesity may impair the effectiveness of compression sleeves and pneumatic pumps