

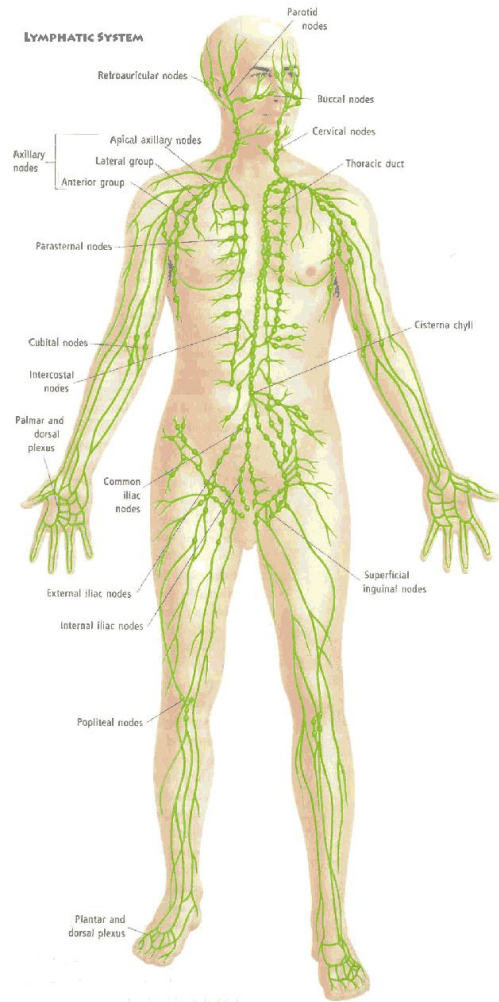


BTL lymphatic drainage – medical background





Lymphatic vs. blood circulatory system



- Blood vessel – arteries, capillaries, veins
- Liquid=blood- oxygenation, nutrients
- Moved- heart, „muscle pump“
- Lungs-heart-limbs-heart-lungs

- Lymphatic vessels, capillaries
- Liquid=lymph – excessive fluids, metabolites
- Move-muscle pump, gravity changes
- Limbs-trunk /blood stream/

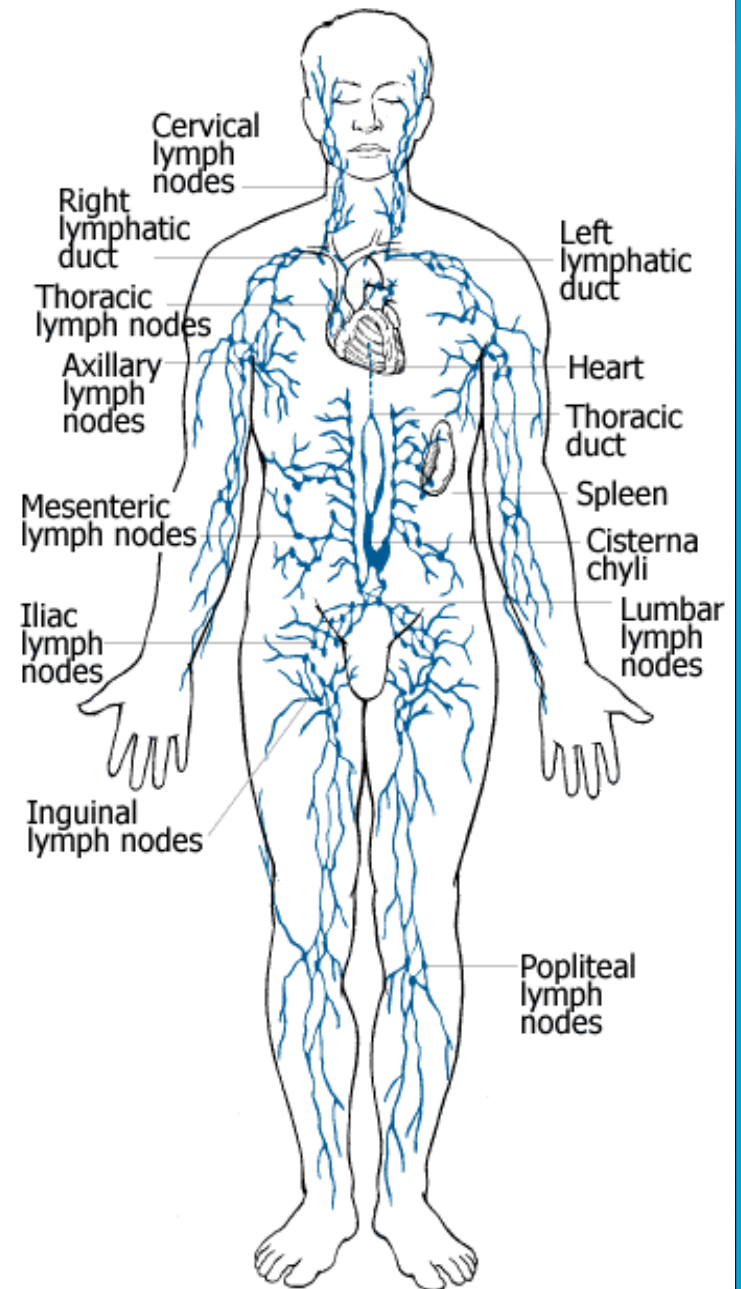
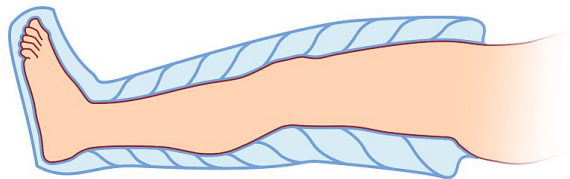




Lymphatic system

Extracellular fluids removal:

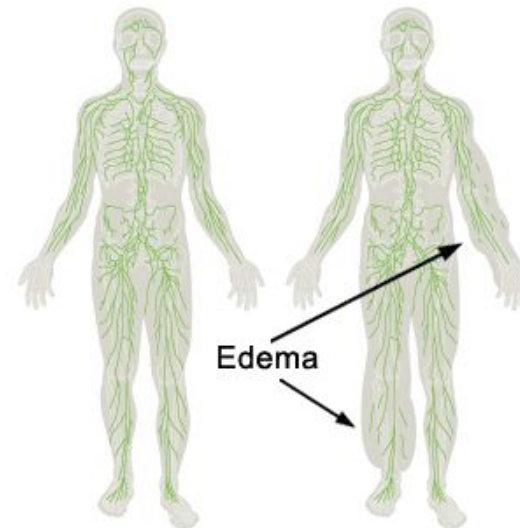
- ◇ Lymph drainnage from distal, peripheral parts towards the trunk
- ◇ Lymph vessels, nodes, special organs /spleen, thymus/
- ◇ Immune system organs
- ◇ Disorder in the path causes extracellular fluid accumulation





Lymphatic system disorders

- ◇ Caused by lymph=extracellular fluid accumulation
- ◇ Swelling
- ◇ Metabolites accumulation
- ◇ Pain
- ◇ Drainage is supported with „muscle pump“ and changes in orientation of the gravitation field / „heavy legs sy.“/





Lymphatic drainage - fields

- **Rehabilitation** — post-surgery , post-immobilization, after lymphatic paths removal or damage, blood circulation disorders
- **Aesthetic medicine** — excessive fluid removal reduces the volume of the extremity and supports local metabolism, regeneration and healing
- **Wellness centers** — regeneration and detoxification- faster recovery + aesthetics





Lymphatic system – typical disorders

- ◇ Lymphoedema /obstruction of the lymph vessels/



- ◇ Heavy leg sy / might be associated with chronic veinous insufficiency/
 - Swelling and pain in legs





Lymphatic system – typical disorders



Fig. 281.—Elephantiasis of the scrotum in a native of Fiji.

- ◇ Surgical damage of the vessel /endoprosthesis, ablation/ -
- ◇ Elephantiasis /Bacterial infection transmitted by mosquitos/





Lymphatic system disorder - therapy

- General causation treatment
- **Symptoms treatment** : mechanical removal of the fluid in the limbs:
 - **Manual lymphatic drainage** /time consuming and physically exhausting/
 - **Instrumental lymphatic drainage** /completely simulates the manual procedure and saves therapist time and energy/
 - Kinesitherapy, elevation, compression





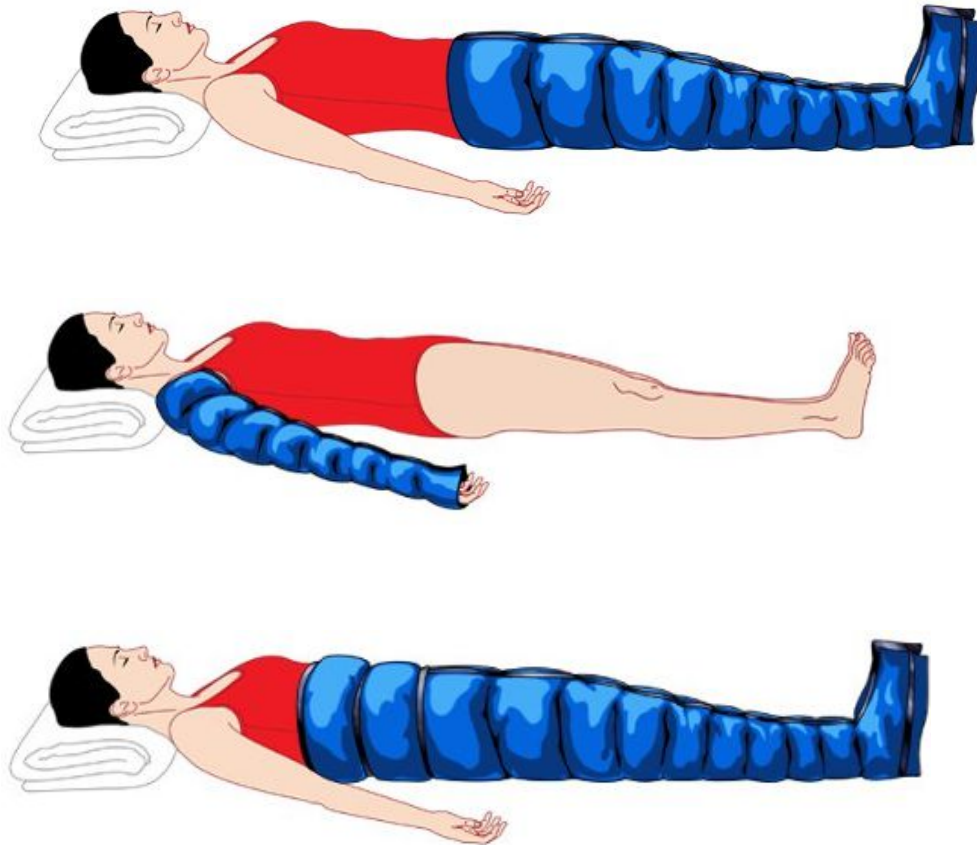
Lymphatic drainage procedure

1. Central lymph nodes, collectors massage/ to empty the nodes and vessels
2. Soft, slow, surface massage from peripheral to central parts /to move the lymph towards the trunk
3. Always respect the lymphatic system anatomy





Lymphastim applicators





Lymphastim indications -medical

- ◇ Chronic oedemas
- ◇ Posttraumatic care
- ◇ Venous insufficiency & ischaemic disease

- ◇ Arthrosis, Carpal tunnel, Algodystrophy
- ◇ Gout, Trophic disorders, Obesity

- ◇ Others in catalogue..





Lymphastim - indications -Aesthetic

- ◇ Heavy legs sy
- ◇ Varices prevention
- ◇ Post-liposuction care
- ◇ Regeneration & detoxification
- ◇ Cellulite

- ◇ Others in catalogue..





THANK YOU FOR YOUR ATTENTION!!!

