

CLT Certification Course Objectives

I. CARDIOVASCULAR/LYMPHOVASCULAR SYSTEM AND MICROCIRCULATION

1. The participant will be able to list and explain the components of the lymphatic system
2. The participant will be able to contribute to discussion questions on the Facebook site on the components of the lymphatic system and Starling's Equilibrium with the instructor and other participants.
3. The participant will be able to list at least 8 adverse changes to the components of the lymphatic system due to lymphedema
4. The participants will be able to accurately draw the lymphotomes on another classmate, explain the normal drainage pathways of the lymphatic system, and discuss how one might re-route drainage around damaged lymphatics.
5. The participant will be able to explain the difference between mechanical and dynamic insufficiency and provide at least 2 examples of each in open discussion with class.
6. The participant will define and explain the relevance of the following terms with lymphedema: lymph load, transport capacity, functional reserve.

II. ETIOLOGIES OF LYMPHEDEMA

1. The participant will be able to explain the difference between primary and secondary lymphedema and provide 1 example of each in a class discussion.
2. The participant will be able to name and describe the different onset times for primary lymphedema.
3. The participant will be able to state how cancer treatment increases the risk of lymphedema. Then, the participant will act as if s/he were providing an in-service to women pre-breast cancer treatment and will state how s/he would explain the risks in a way as to not deter a patient from receiving the recommended medical treatment.
4. The participants will list 3 key considerations with treatment when working with the different patient populations within lymphedema: pediatrics, cancer, lack of muscle contraction (MS, CVA, etc), orthopedic, obesity, filariasis, venous, palliative, heart disease, and one more of his/her choosing.

III. COMPLEX LYMPHATIC THERAPY

1. The participant will be able to describe the 5 pillars of CLT treatment in pre-class Facebook discussions.
2. The participant will be able to list the contraindications of CLT and explain why each is a contraindication.
3. The participant will be able to list one pro and one con for adjuncts to CLT, to include: pumps, surgery, medication, herbals, laser, and acupuncture.
4. The participant will be able to list and explain at least 2 skin care/precautions during a class discussion.
5. The participant will be able to accurately measure 2 arms and 2 legs and calculate volume, percent difference, and reduction values.
6. The participant will be able to modify the UE and the LE decongestive exercise sequence for an assigned patient's co-morbidity.

7. The participant will be able to explain the difference between the different types of garments and select the appropriate garment(s) for provided case study.
8. The participant will be able to properly bandage the UE and LE of another participant for that participant to wear overnight.
9. The participant will be able to properly self-bandage his/her UE and LE and be able to verbalize how s/he would instruct a patient.
10. The participant will be able to verbally explain the different modifications one can use with compression bandaging and the pros/cons and/or the proper uses of each in a class discussion.
11. The participant will be able to apply the principles of Casley-Smith MLD and perform the proper MLD sequence for the following scenarios: UE with intact nodes, UE without intact nodes, LE with intact nodes, and LE without intact nodes.
12. The participant will be able to verbalize how s/he would instruct a patient in self-MLD in a group lab.
13. The participant will be able to properly execute his/her portion of a patient evaluation and treatment for both UE and LE involvement with the other participants.
14. The participant will be able to discuss in a group the possible precautions and/or conditions requiring modifications with UE lymphedema as a result of breast cancer.

IV. CONCLUSION OF CLASS

1. The participant will be to apply knowledge learned during self-study and in class to pass, with at least a 90, the comprehensive written test on anatomy, physiology, pathology, and treatment options related to lymphedema.
2. The participant will be to apply knowledge learned during self-study and in class to pass, with at least a 90, the comprehensive practical on the provided case study. The participant must include the following treatment components in his/her practical: compression bandaging, garment(s) selection, and MLD.