**Evaluation of lymphoedema by ultrasound**

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How will this assessment contribute to lymphedema management?

Measuring limb circumference and/or pitting are simple and standard methods for lymphedema assessment. However, it is sometimes difficult to define lymphedema severity and hence, appropriate management strategies, due to invisibility of the subcutaneous tissue. Ultrasonography allows clinicians to visualize the structure of subcutaneous tissue at each site. For example, ultrasonographic visualization of a cobblestone appearance at a particular part of the limb suggests the need for addition of care at that site. Hence, ultrasonographic evaluations will improve the quality and effectiveness of lymphedema management and will contribute to the reduction of cellulitis episodes.

Key-points during assessment of lymphedema

Define the subcutaneous tissue and consequently assess the presence or absence of “hyperechoic areas”, “superficial fascia”, and “cobblestone appearance”. These parameters are closely related to lymphedema severity. If there are no features indicating hyperechoic areas, it indicates ISL stage 0 or I. The presence of hyperechoic areas indicates accumulation of interstitial fluid. With an increase in accumulated fluid, the superficial fascia becomes invisible, representing ISL stage II or late-II. A further increase in the volume of subcutaneous fat and fibrotic tissue along with a cobblestone appearance represents ISL stage late-II or III.