Reply letter to the editor regarding ultrasound examination for en-suite measurements in lipedema

Phlebology

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We thank Güvener et al. for their valuable comments on our article published in *Phlebology*, titled "Ultrasound criteria for lipedema diagnosis".¹ Despite being a recognized disease, Lipedema is currently underdiagnosed by healthcare providers and is often misdiagnosed as obesity or lymphedema. Another common problem is lipedema's name, which sounds like lipidemia or lipemia, which would mean alteration of blood fats, increasing confusion even more.² Despite its unclear etiopathogenesis,³ lipedema is currently considered a loose connective tissue and lymphatic disease,⁴ not only a fatty tissue disease.

Your comment suggests we all believe health care providers should be prompted to diagnose lipedema as early as possible so that patients are offered the best management solutions,⁵ avoiding the progression of the disease.⁶ We could not agree more because if patients are diagnosed earlier, they can control it and prevent progression, living a normal life.

We completely agree with the importance and strategy of avoiding compression of soft tissues during measure. We also understand that dermal thickness is essential, and a fascinating paper by Naouri et al. ⁷ showed us that increase in dermal thickness could differentiate lymphedema from lipedema. However, the same study showed no difference between controls and lipedema patients regarding dermal thickness, limiting its practical usage for lipedema diagnosis. Lymphoedema patients also had 2.15 (±0.62) mm dermal thickness in the thigh, while lipedema had 1.51 (± 0.31) mm and controls 1.46 (± 0.21) mm. This means a medium difference of 0.64 mm between lymphedema and lipedema patients. Our measured medium thickness in thighs was 18.41 mm (20.9 mm lipedema and 12.67 mm for controls), meaning a magnitude difference of measurements of 3.47%. We agree dermal thickness per se is important, but its measure seems irrelevant while measuring adipose tissue because of its inherently small size. Naouri also showed us the problem in measuring the dermis and hypodermis separately: there was unclear lower dermis limits in lymphoedema, using an even more high-definition transducer.

Regarding the comment suggesting lipedema management is similar to lymphedema. There are some similarities, but we believe progression in lipedema treatment knowledge is harmed when a clear distinction is not performed. Lipedema is an inflammatory disease with fat deposition and lymphedema as a consequence,⁴ while lymphedema is a clinical manifestation of impaired lymphatic transport with inflammation as a consequence.⁸ Partial improvement of lipedema symptoms doing a lymphedema treatment strategy could happen because of lymphatic vasculature dysfunction caused by lipedema inflammation.⁹ In our view, we would be treating just the consequence of the problem, not the cause,³ and the disease would continue to advance.

We aimed to suggest a reliable and straightforward method to help with the prompt diagnosis of lipedema. Hence including the dermal thickness offers a fast, reproducible measure while avoiding an unclear limit. Not including the dermal thickness risks a cut-off value less accurate. Our cut-off result table include dermal thickness; it should not be used without this measurement, even if you remove a medium dermal thickness size from it. Therefore, this rich discussion opens an opportunity for a deeper study of the subject.

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