

**Ultrasonography and thermography as new methods of assessing
cellulitis with lymphoedema**

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Abstract

Recurrent cellulitis (and erysipelas) is a cause of worsening lymphoedema. Therefore, cellulitis should be prevented as part of lymphoedema management. In patients with lymphoedema, lymphatic circulation is abnormal and protein-rich lymph accumulates. We previously used high-frequency ultrasonography in a case-control study of patients with lymphoedema and a history of cellulitis. We found that dermal structure differed between the patients with history of cellulitis and without. Comprehensive assessment of the skin, including the structure of the subcutaneous tissue and immunological function, is required to prevent cellulitis. Such assessment is suggested as part of a management strategy to prevent recurrent cellulitis. Therefore, we established a new project that aims to prevent recurrent cellulitis in patients with lymphoedema. We applied ultrasonography and thermography to reveal some risk factors of cellulitis in such patients. Here, we will present the results of this case study using these non-invasive, safe, and clinically useful modalities.

Speaker Information

Dr. Misako Dai, PhD, RN, PHN is a specialist of lymphoedema and assistant professor at Kanazawa University, Japan. She has developed vibration care and new ultrasonographic assessment methodology to improve lymphoedema management. She has received three awards from ILF for her studies, which have been published. She served as chief secretariat of the 4th and 7th ILF conferences in Japan. She then headed the LIMPINT study in Japan with Prof. Junko Sugama.