

DermaScan Ultrasound

Investigating skin changes in individuals with an inherited skin condition using DermaScan

Case information

Study title: Non-invasive Analysis of Skin in Recessive Dystrophic Epidermolysis Bullosa Using High-Frequency Ultrasound: A First Case Report

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Authors: Wallblom K.; Holmgren K.; Lundgren S.; Hoppe T. et al.

Aim: To investigate whether high-frequency ultrasound can detect and quantify structural changes associated with recessive dystrophic epidermolysis bullosa.

Please note: This study is an independent scientific publication. The described outcomes are not part of the intended use of the DermaScan.

Solution and method

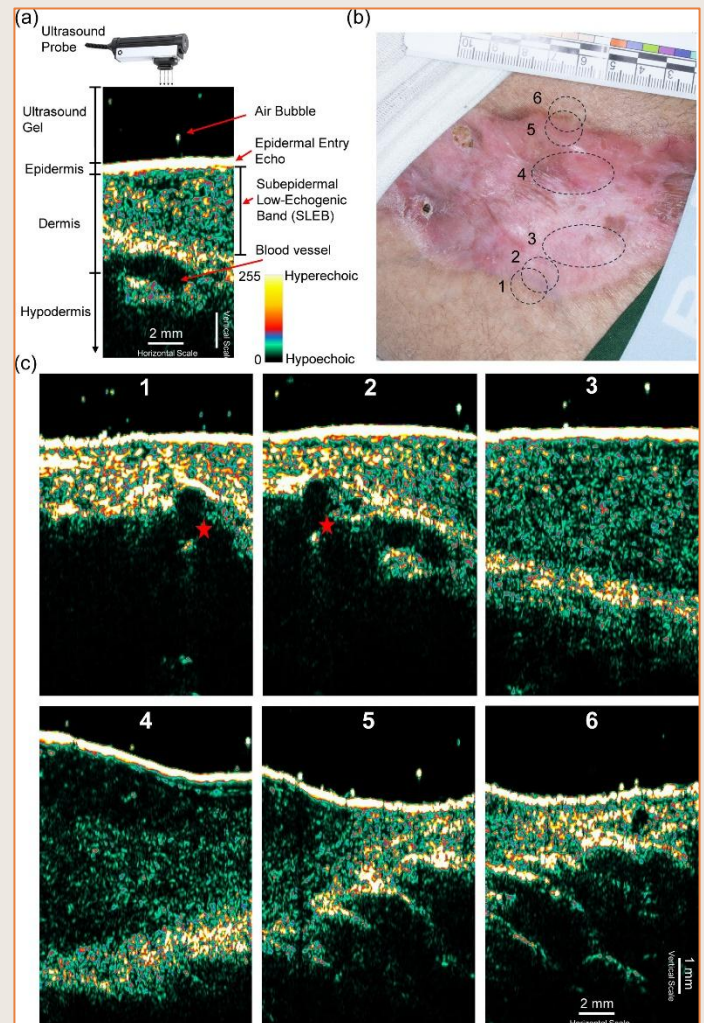
A 16-year-old male with a confirmed diagnosis of recessive dystrophic epidermolysis bullosa was investigated. Objective assessments were performed with the DermaScan at six scanning positions, enabling non-invasive visualization and quantification of skin thickness and density at both healthy and affected sites.

Results and conclusions

The study found an increase in subepidermal low-echogenic band (LEB) thickness in erythematous skin both with and without blistering, increasing from 0.11 mm to 3.10 mm. Likewise, a decrease in dermal density was observed, suggesting possible changes in tissue properties.

The results show that high-frequency ultrasound can non-invasively visualize and quantify structural skin characteristics in this study population.

Please note: Cortex devices provide objective measurement data for research and cosmetic studies. They are not intended for diagnosis or treatment of medical conditions.



a) Schematic illustration of ultrasound imaging. **b)** Measurements were performed at both normal-appearing skin (1, 6), erythematous skin (2, 3, 5) and skin with signs of blistering (4). **c)** Increases in LEB thickness and hypoechogenicity in erythematous and blistering skin.

Picture adapted from Wallblom et al., 2026.



The DermaScan

Provides outstanding image quality based on ultra-high frequency ultrasound.

To learn more about our solutions, visit cortex.dk



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