

Small number of genes involved in X-linked ichthyosis

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(HealthDay) -- Patients with X-linked recessive ichthyosis (XLRI) have altered expression in a small number of genes, and although moisturizer treatment improves dryness, it doesn't affect other biophysical properties or gene expression, according to a study published online April 5 in the *British Journal of Dermatology*.

Torborg Hoppe, M.D., of Uppsala University in Sweden, and colleagues studied the biophysical and [molecular changes](#) in the skin of 14 XLRI patients and 14 healthy controls. At baseline, skin dryness score, trans-epidermal water loss (TEWL), and skin surface pH were monitored. Profiles of mRNA expression were determined by oligonucleotide arrays from punch biopsies. Skin measurements were repeated following four weeks of treatment with three different moisturizers.

The researchers found that, compared to healthy controls, XLRI patients showed increased dryness and TEWL but equal skin pH. Expression was altered in 27 genes, with no indication of activation of inflammation or repair pathways. Based on qualitative [polymerase chain reaction](#), five selected genes were found to be significantly altered. Treatment with the moisturizers improved skin dryness but had no effect on TEWL, pH, or expression of selected genes.

"Despite a dysfunctional skin barrier, the limited number of genes altered in XLRI skin suggests that no inflammatory or repair mechanisms are triggered," the authors write. "Treatment with moisturizers does not have any major impact on the skin barrier properties of XLRI patients."

More information: [Abstract](#)
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