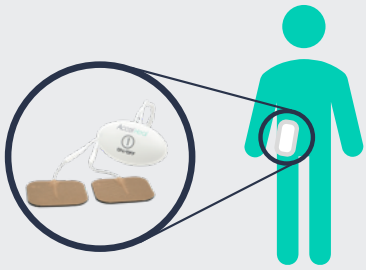
CHANGES IN S100 PROTEINS IDENTIFIED IN HEALTHY SKIN FOLLOWING ELECTRICAL STIMULATION: RELEVANCE FOR WOUND HEALING

Accel Heal
ELECTRICAL STIMULATION WOUND THERAPY

Although **electrical stimulation** has been shown to improve the rate of wound healing, the way in which it works is not fully understood.

This study aimed to identify which **genes** respond to electrical stimulation.

1. An **Accel-Heal®** device was applied to the skin of healthy, unwounded volunteers for 48 hours



2. Biopsies were taken from the test site and the opposite (untreated) side.

3. Genes expression in the biopsies were tested by microarray and compared

RESULTS

105 → 25

Genes were affected by Accel-Heal®

25 of those genes were known to be increased in a chronic wound...

25

but were **decreased** in Accel-Heal® treated skin. This included 3 genes involved in **inflammation**

Electrical stimulation using Accel-Heal® can affect the genes expressed by the cells in the skin. Several of these genes are implicated in chronic wounds and in inflammation. This change in gene expression may represent a dampening effect and may be of benefit to wounds

VIEW THIS ARTICLE ONLINE >

VIEW ACCEL HEAL® PRODUCT INFO>

CITATION: Lallyett C, Yeung C-YC, Nielson RH, et al. Changes in S100 Proteins Identified in Healthy Skin following Electrical Stimulation: Relevance for Wound Healing. Adv Skin Wound Care. 2018;31(7):322-327. doi:10.1097/01.ASW.0000533722.06780.03