

〈一般論文〉

鍼刺激による皮膚への効果

加川大治*¹, 深川聡子¹, 大内 敦¹, 北原 隆¹, 江川雅人², 矢野 忠³

Effects of Acupuncture on Human Skin Characteristics

Daiji KAGAWA*¹, Satoko FUKAGAWA¹, Atsushi OHUCHI¹,
Takashi KITAHARA¹, Masato EGAWA², Tadashi YANO³

(Accepted: April 27, 2011)

Abstract

[Objective] As the Japanese medical system incorporates various holistic approaches, interest in acupuncture treatment is increasing. Acupuncture has been proven to be effective in the treatment of atopic dermatitis. This present study investigated whether or not acupuncture treatment can affect the skin condition. [Methods and Results] Tape stripping was performed on inner forearm skin of fourteen healthy male subjects, to disrupt the skin barrier functions. Subsequently, a 15-minutes-acupuncture treatment was given to half of the subjects by inserting a needle to a depth of 5 mm into 6 points around the tape-stripped area and 6 acupoints on the legs and arms. Capacitance and trans-epidermal water loss (TEWL) levels were measured at hour 0, 1, 3 and 24 after the treatment. At hour 24, rate of recovery in TEWL in the acupuncture treatment group was higher than non-treatment group. Long-term repeated treatment: A total of 20 healthy men with higher TEWL levels on the cheek were chosen as subjects. A 10-minutes-acupuncture treatment was given to half of the subjects on 20 acupoints once every week during a 12-weeks-period (Jan.-May). At 4-week intervals, the levels of capacitance and TEWL were measured on the cheek and inner forearm. Tape stripping was performed after the measuring on the inner forearm. Then, the level of TEWL on the tape-stripped area was measured at hour 0, 3, 24 and 48. On the cheek TEWL values were significantly lower in the acupuncture treatment group than the non-treatment group at weeks 4 and 12. And at week 12, the change in TEWL after tape stripping on the inner forearm was smaller in the acupuncture treatment group than the non-treatment group. [Conclusion] Acupuncture treatment was found to be effective in preventing skin from losing skin barrier function, as well as accelerating the recovery of skin barrier disruption. However, long-term repeated treatment would be necessary in clinical practice.

Key words: acupuncture, skin barrier function, tape stripping, TEWL, capacitance.