

LETTER

Cosmetic acupuncture to enhance facial skin appearance: a preliminary study

Moisturising of the skin is recognised as the first anti-ageing skin care.¹ However, with changes in office environments in recent years, such as widespread heating and cooling, more people have dry skin.² The balance of the water content, oil content and natural moisturising factors in the stratum corneum are important factors in maintaining moisturisation.³

Recently, cosmetic acupuncture has been catching the attention of increasing numbers of women who want to enhance their beauty and health, especially by revitalising and rejuvenating the facial skin.⁴⁻⁷ However, a search of PubMed found no studies using scientific methodology. To explore whether acupuncture can modulate the water and oil content of the skin, this study was designed as a preliminary experimental study with a crossover design, consisting of an acupuncture intervention period and a non-intervention (control) period.

Two women (50-year-old participant A, 29-year-old participant B) received five consecutive acupuncture sessions once a week for 1 month. Disposable tubes and needles (type J15-03, diameter 0.10 mm, length 15.0 mm, Seirin Corporation, Shimizu, Japan) were inserted across the facial skin at the 20 locations: BL1, GB1, ST1, ST3, ST4, ST7, SI19, CV24, Ex-HN3 and Ex-HN4. These acupuncture points were selected simply as anatomical marks of insertion to give mechanical acupuncture stimulation to the facial skin, not in relation to the theory of classical acupuncture medicine. Needles were inserted at 1–3 mm depth and retained for 10 min. Water content and oil content of the facial skin were measured using Skin Analyzer Clinical Suite 2.1 (MMandniic, Tokyo, Japan) and compared before and after the first acupuncture session and before and after the five consecutive acupuncture sessions. Mean water content for a 50-year-old Japanese woman such as participant A

is 65% and mean oil content 8%; the mean values for a 29-year-old Japanese woman such as participant B are 80% and 20%, respectively⁸ (the manufacturing company have been unable to provide us with CIs for these data).

After one acupuncture session, for participants A and B, respectively, water content changed from 89% to 88% and 76% to 80% (control condition: 87% to 85% and 74% to 68%), and oil content changed from 32% to 42% and 8% to 40% (control: 38% to 41% and 8% to 6%). The cumulative effects of the five acupuncture sessions seen for participants A and B, respectively, were a change in water content from 89% to 87% and 76% to 80%, compared with no changes in the control condition (87% to 87% and 74% to 76%; figure 1), and a change in oil content from 32% to 38% and 8% to 19%, compared with 38% to 37% and no change (8% to 8%) for the control condition (figure 2).

These preliminary results suggest that cosmetic acupuncture increased the water and oil content of facial skin in a female participant whose water content and oil content were lower before receiving acupuncture than those of the mean values of women of the same age. Acupuncture might therefore contribute to enhancing the appearance of the skin. We are currently preparing a larger-scale study to verify these findings.

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Competing interests None.

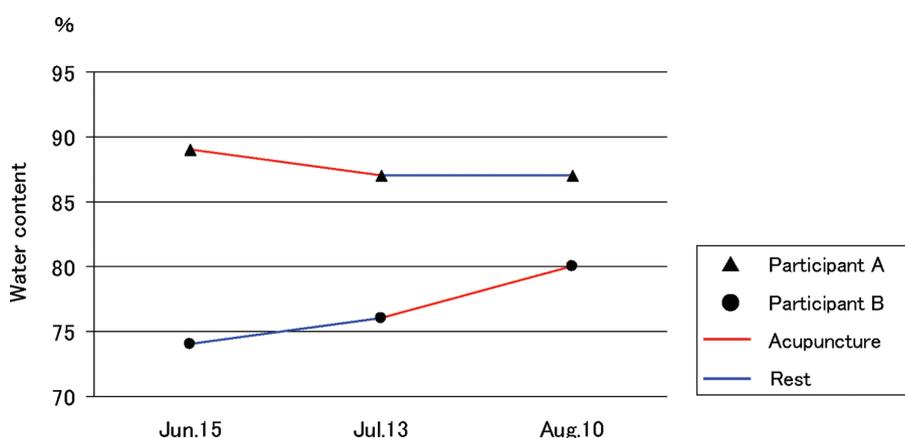


Figure 1 Changes in water content of the skin over control period and course of five acupuncture sessions.

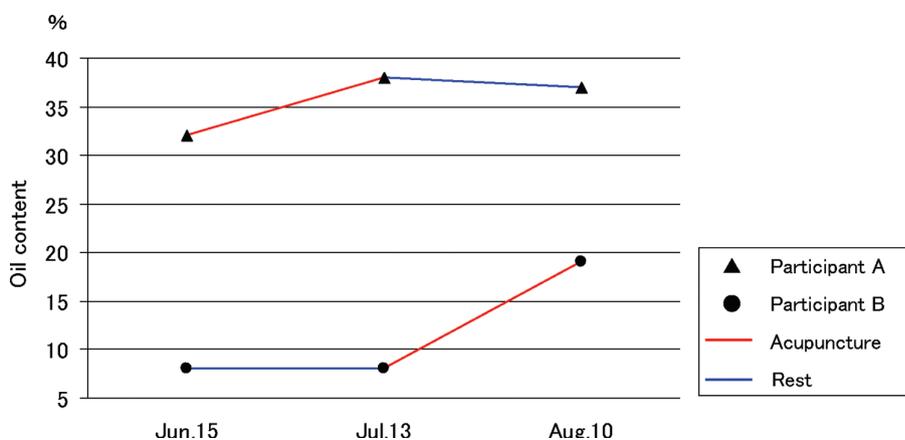


Figure 2 Changes in oil content of the skin over control period and course of five acupuncture sessions.

Patient consent Obtained.

Ethics approval The study was performed in accordance with the ethical standards set forth in the Helsinki Declaration, 2010 version. Since this was a small preliminary internal experimental trial in the laboratory, approval by the medical ethics committee was not required according to the medical ethics policy of Tsukuba University of Technology, confirmed by the Dean. The participants provided written informed consent to participate and for the results to be published in an academic paper.

Provenance and peer review Not commissioned; internally peer reviewed.

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REFERENCES

1. Bonté F. Skin moisturization mechanisms: new data. *Ann Pharm Fr* 2011;69:135–41.
2. Development of cosmetic ingredient. Shiseido Japanese Web site. <http://www.shiseido.co.jp/corp/technology/development/products/material.html#item02>. (accessed 4 December 2011).
3. Kawai N. Natural moisturizer. *Fragrance Journal* 2005;33:83–8.
4. Thambirajah R. Clinical experience: cosmetic acupuncture. *The J Chin Med* 2003;72:42–4.
5. Doran V. An introduction to facial revitalisation acupuncture. *Eur J Orient Med* 2007;5:4–9.
6. Isaacs N. Hold the chemicals, bring on the needles. *New York Times*, 2007.
7. Kingston A. True cosmetic acupuncture still has its roots in traditional Chinese medicine. *The J Chin Med* 2011;96:46–51.
8. MMandniic. Manual for skin analyzer clinical suite 2.1. Tokyo: MMandniic, 2010.



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