Influence of acupuncture on type I hypersensitivity itch and the wheal and flare response in adults with atopic eczema - a blinded, randomized, placebo-controlled, crossover trial.

Abstract:

Itch is a major symptom of allergic skin disease. Acupuncture has been shown to exhibit a significant effect on histamine-induced itch in healthy volunteers. We investigated the effect of acupuncture on type I hypersensitivity itch and skin reaction in a double-blind, randomized, placebo-controlled, crossover trial. An allergen stimulus (house dust mite or grass pollen skin prick) was applied to 30 patients with atopic eczema before (direct effect) and after (preventive effect) two experimental approaches or control observation: acupuncture at points Quchi and Xuehai [verum acupuncture (VA), dominant side], 'placebo-point' acupuncture (PA, dominant side), no acupuncture (NA). Itch intensity was recorded on a visual analogue scale. After 10 min, wheal and flare size and skin perfusion (via LASER-Doppler) were measured at the stimulus site, and the validated Eppendorf Itch Questionnaire (EIQ) was answered. Mean itch intensity was significantly lower in VA (35.7 +/- 6.4) compared to NA (45.9 +/- 7.8) and PA (40.4 +/- 5.8) regarding the direct effect; and significantly lower in VA (34.3 +/- 7.1) and PA (37.8 +/- 5.6) compared to NA (44.6 +/- 6.2) regarding the preventive effect. In the preventive approach, mean wheal and flare size were significantly smaller in VA (0.38 +/- 0.12 cm²/8.1 +/- 2.0 cm²) compared to PA (0.54 +/- 0.13 cm²).
cm(2)/13.5 +/- 2.8 cm(2)) and NA (0.73 +/- 0.28 cm(2)/15.1 +/- 4.1 cm(2)), and mean perfusion in VA (72.4 +/- 10.7) compared to NA (84.1 +/- 10.7). Mean EIQ ratings were significantly lower in VA compared to NA and PA in the treatment approach; and significantly lower in VA and PA compared to NA in the preventive approach. Acupuncture at the correct points showed a significant reduction in type I hypersensitivity itch in patients with atopic eczema. With time the preventive point-specific effect diminished with regard to subjective itch sensation, whereas it increased in suppressing skin-prick reactions.