

Acupuncture in Patients With Seasonal Allergic Rhinitis A Randomized Trial

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Abstract

Background: Acupuncture is frequently used to treat seasonal allergic rhinitis (SAR) despite limited scientific evidence.

Objective: To evaluate the effects of acupuncture in patients with SAR.

Design: Randomized, controlled multicenter trial. (ClinicalTrials.gov: NCT00610584)

Setting: 46 specialized physicians in 6 hospital clinics and 32 private outpatient clinics.

Patients: 422 persons with SAR and IgE sensitization to birch and grass pollen.

Intervention: Acupuncture plus rescue medication (RM) (cetirizine) ($n = 212$), sham acupuncture plus RM ($n = 102$), or RM alone ($n = 108$). Twelve treatments were provided over 8 weeks in the first year.

Measurements: Changes in the Rhinitis Quality of Life Questionnaire (RQLQ) overall score and the RM score (RMS) from baseline to weeks 7 and 8 and week 16 in the first year and week 8 in the second year after randomization, with predefined noninferiority margins of -0.5 point (RQLQ) and -1.5 points (RMS).

Results: Compared with sham acupuncture and with RM, acupuncture was associated with improvement in RQLQ score (sham vs. acupuncture mean difference, 0.5 point [97.5% CI, 0.2 to 0.8 point]; $P < 0.001$; RM vs. acupuncture mean difference, 0.7 point [97.5% CI, 0.4 to 1.0 point]; $P < 0.001$) and RMS (sham vs. acupuncture mean difference, 1.1 points [97.5% CI, 0.4 to 1.9 points]; $P < 0.001$; RM vs. acupuncture mean difference, 1.5 points [97.5% CI, 0.8 to 2.2 points]; $P < 0.001$). There were no differences after 16 weeks in the first year. After the 8-week follow-up phase in the second year, small improvements favoring real acupuncture over the sham procedure were noted (RQLQ mean difference, 0.3 point [95% CI, 0.03 to 0.6 point]; $P = 0.032$; RMS mean difference, 1.0 point [95% CI, 0.2 to 1.9 points]; $P = 0.018$).

Limitation: The study was not powered to detect rare adverse events, and the RQLQ and RM scores were low at baseline.

Conclusion: Acupuncture led to statistically significant improvements in disease-specific quality of life and antihistamine use measures after 8 weeks of treatment compared with sham acupuncture and with RM alone, but the improvements may not be clinically significant.

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