Acupuncture in patients with allergic rhinitis: Analysis of study interventions conducted and syndrome patterns identified by a randomized multicenter study (ACUSAR)

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Background
Acupuncture was efficient and superior to sham acupuncture and a control group in the ACUpuncture in Seasonal Allergic Rhinitis (ACUSAR) trial. The article aims to inform about the study intervention, the underlying therapeutic ideas and clinical consequences.

Design
Three-armed, randomized, controlled multi-center-trial with a 16-week follow-up during the SAR season in the first trial year and an 8 week follow-up during the SAR season in the following year.

Setting
Outpatient or private clinics in Germany.

Intervention
422 Patients with seasonal allergic rhinitis on birch and grass pollen have been randomized to fall into 3 groups: 12 sessions of semi-standardised acupuncture plus rescue medication (RM, Cetirizine) or 12 sessions of sham acupuncture plus RM or RM alone during the initial two months of the study. Study intervention was defined in a Delphi consensus procedure including five experts from two major German acupuncture associations and three experts on trial methodology and statistics. A consensus between the need for standardisation and individualisation was defined using a semi-standardised treatment in the acupuncture group: 4 obligatory acupuncture points, ≥ 3 out of 8 facultative basic points and ≥ 3 facultative local or distant acupuncture points. Sham acupuncture consisted in superficial needling of at least 5 of 7 predefined, bilateral, distant non-acupuncture points. Needling characteristics such as point location, needling time, manipulation and achieved ‘De Qi’ had to be documented after each session.

Results
CM syndrome diagnoses reported most frequently were Wind-Cold invading the lung’ and ‘Wind-Heat invading the lung’ (37 % each). In the acupuncture group all basic obligatory points were used in 97 % of cases (LI 4, LI 11, LI 20, EX-HN 3 Yintang). The most frequently used basic optional acupuncture points were GB 20, LIV 3, ST 36, LU 7 and SP 6. The total number of needles used was higher in the acupuncture group (15.7 ± 2.5) compared to the sham acupuncture group (10.0 ± 1.6).

Conclusions
CM syndrome diagnoses and point selection in the acupuncture group of the trial corresponded to clinical experiences in CM treatment of SAR. Point location and a higher number of needles in the acupuncture group compared to the sham acupuncture group may have influenced the positive trial results.

Keywords
Acupuncture; randomised controlled trial; seasonal allergic rhinitis; study intervention; sham acupuncture; Chinese medicine; syndrome patterns