100%

100%

Complementary medicine

We **recommend against** acupuncture as standard therapy for AE.

100%

Agreement

(13/13)

Expert Consensus

We **recommend against** phytotherapy as standard therapy for AE.

100 % Agreement

(14/14)
Expert Consensus

We **recommend against** blood autologous serum as standard therapy for AE.

100%

Agreement

(12/12)

Expert Consensus

We **recommend against** Chinese herbal medicine as standard therapy for AE.

100 % Agreement
(12/12)
Expert Consensus

We cannot make a recommendation with respect to alpine climate therapy for AE.

>75%

(11/12)

Expert Consensus

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Introduction

Complementary medicine describes a wide variety of healthcare practices used alongside standard medical treatment. These include alternative health approaches such as traditional Chinese medicine, acupuncture and others.

Acupuncture

Acupuncture has been widely applied for the treatment of many chronic diseases, especially dermatological conditions. ^{1, 2} Some clinical trials have demonstrated that acupuncture can significantly reduce itch intensity and allergen-induced basophil activation in patients with AE. ^{3, 4}

A recent systematic review by Jiao et al⁵ included eight RCTs (with 434 participants) compared the efficacy of acupuncture versus no treatment/placebo/conventional medicine in patients with chronic eczema. One included RCT showed that acupuncture was better than no treatment at reducing itch intensity but the results were not considered as reliable because of the low number of patients included (10 patients). The combined results of six RCTs showed that acupuncture was better than conventional medicine at reducing the eczema area and severity index (EASI) and the combined results of seven RCTs showed that acupuncture was better than conventional medicine in terms of global symptom improvement in AE. A meta-analysis of six and seven RCTs found a reduction in EASI (MD: -1.89, 95% CI: -3.04 to -0.75, I²: 78%) when acupuncture e was compared to conventional medicine, and in global symptom improvement (RR: 1.59, 95% CI: 1.20 to 2.11, I²: 55%), respectively. No data on QoL and AE recurrence rate were available. No severe adverse events were found related to acupuncture.

The certainty of evidence of all outcomes was graded as low, because of high risk of bias, too small sample sizes and indirectness (due to studies having included patients with chronic, not explicitly atopic, eczema). The effects of acupuncture may have been exaggerated in these trials.

Phytotherapy

We searched for studies examining the efficacy of phytotherapy in atopic eczema and we found only four studies including a small number of patients.

Fermented rice flour containing Lactobacillus paracasei CBA L74 (heat-killed probiotic lactobacilli) 7g/day diluited in a liquid in 10 young patients (6 months-6 years old) for 12 weeks in combination with topical corticosteroids and emollients was able to reduce the need of steroid application in half of the patients and the stop of steroid application in the other half.⁶

A single-center, open-label, pilot study on 20 adult patients with moderate-severe AE found that the application of a cream containing SOD 100000IU+combination of plant extracts twice daily in monotherapy for 30 days decreased the overall SCORAD of 67% from baseline.⁷

A double-blinded, randomized, placebo-controlled trial on 45 pediatric patients compared the efficacy of a cream containing an extract of Ficus carica L. (Melfi cream) versus hydrocortisone or placebo: both Melfi cream and hydrocortisone cream after 14 days of application determined a significant reduction of SCORAD compared to placebo.⁸

In another controlled study the efficacy and skin biophysiology of a cream and cleanser containing lipid complex with shea butter extract was compared with a ceramide product on a total of 58 AE patients,

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for 4 weeks of therapy. The treatment was well accepted, with improvement of SCORAD values and DLQI but no significant differences between the two products were found.⁹

There is lack of well defined RCT and it should be noted that plant extracts may cause contact sensitization.¹⁰

Autologous Blood Therapy

A randomized double-blind placebo-controlled trial on 22 patients evaluated the clinical efficacy of intramuscular autologous plasma therapy and autologous high-molecular-weight plasma protein fraction therapy (AHPT) for 8 weeks in adult patients with recalcitrant atopic eczema. At the end of treatment patients in the AHPT group had a significant reduction in SCORAD and DLQI; no significant changes in the autologous plasma therapy group. Long term results were not maintained in either AHPT or autologous plasma therapy group.¹¹

In another trial including 16 AE patients sensitized to HDM (Dermatophagoides farinae) the effects of intramuscular administration of autologous total immunoglobulin G twice weekly for 4 weeks were evaluated. Results showed a significant reduction of specific IgE and increase in specific IgG, showing a potential anti-allergic immunomodulatory effects in AE patients of autologous total IgG injections. No adverse events were declared.¹²

Long-term changes of clinical severity and laboratory parameters after intramuscular autologous IgG (Autologous ImmunoGlobulin Therapy: AIGT) for 4 weeks were studied in 3 AE adult patients and followed up for 2 years. In all cases a clinical improvement and a decrease in IgE levels were seen, with one patient who experienced a clinical improvement at week 40 until the end of follow up and the other two patients who had faster clinical improvement but a shorter duration of the response.

Authors concluded that AIGT had long-term favorable effects on both clinical severity and laboratory parameters in selected patients with severe recalcitrant AE. No adverse events emerged during the observation period.¹³

There is only very limited evidence supporting autologous blood therapy in the treatment of AE.

Chinese herbal medicine

Chinese herbs have traditional been used in Chinese medicine for many years.

Recent systematic reviews could not find conclusive evidence to demonstrate that topical application of CHM for AE was superior to other control interventions due to methodological weaknesses of the included randomised controlled trial¹⁴ and could not find conclusive evidence that CHM taken by mouth or applied topically to the skin could reduce the severity of eczema in children or adults.¹⁵

Well-designed, adequately powered RCTs are needed to evaluate the efficacy and safety of CHM for managing eczema.

High altitude alpine climate

Fifteen observational studies were included in a recent review concerning 40.148 patients. Four studies concerning 2.670 patients presented follow-up data over a period of 1 year. ¹⁶ Quality assessment showed serious study limitations, therefore resulting in a very low level of evidence for the described outcomes.

Patient characteristics were not well described, and data on other pharmacological therapy were not provided. In most studies, style of reporting was very global and details were often lacking, making it

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difficult to interpret the data. Because no trials have been conducted and no control groups were included in the observational studies, there is no reliable data on which elements of alpine climate treatment are responsible for the observed effect.

The results of this systematic review provide very low quality evidence that alpine climate therapy results in decreased disease activity and reduced corticosteroid requirement.

A small study including 7 patients with atopic eczema, who spent 5 days in a moderate altitude mountain region, reported no changes in SCORAD.¹⁷

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