



Title: Systematic Review of Treatments of Atopic Eczema

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Aim:

To produce an up-to-date coverage 'map' of randomized controlled trials (RCTs) of treatments of atopic eczema (syn. atopic dermatitis) and to assist in making treatment recommendations by summarizing the evidence from RCTs using qualitative and quantitative methods.

Results and Conclusions:

- This systematic literature review found a lack of evidence supporting many of the products used in preventing and treating atopic eczema. Most studies are short-term trials of 'me too' products, and the standards of clinical trial reporting are poor.
- Little research has evaluated commonly used treatments compared with each other or in combination.
- Also lacking are common outcome measures for issues that are important to patients and data on questions that physicians and people with atopic eczema deem important.

Recommendations:

Urgent primary research priorities include RCTs of wet-wrap treatments, the clinical benefit of allergy testing, the use of water softeners, the role of specialist nurses, comparisons of tacrolimus and ascomycin against topical corticosteroids, studies of disease prevention, and the use of emollients in preventing disease relapse.

Methods:

Data sources included electronic searching of MEDLINE, EMBASE, the Cochrane Controlled Clinical Trials Register, the Cochrane Skin Group specialized register of trials, handsearching of atopic eczema conference proceedings, followup of references in retrieved articles, contact with leading researchers, and requests to relevant pharmaceutical companies. Only RCTs of therapeutic agents used to prevent and treat atopic eczema in people of any age were considered for inclusion. Only studies where a physician diagnosed atopic eczema or atopic dermatitis were included. Two observers extracted data onto abstraction forms, with discrepancies resolved by discussion. In total, 1165 possible RCTs were retrieved in hard copy for further scrutiny. Of these, 893 were excluded from further analysis because appropriate data were missing. The 272 remaining RCTs of atopic eczema covered at least 47 different interventions which could be broadly categorized into ten main groups.

Further research required:

In addition to further primary research, this review also suggests the need for further secondary research by systematically reviewing some of the major treatment groups, eg, antihistamines and essential fatty acids (some of these are already underway within the Cochrane Skin Group). Methodological research is needed to increase the clinical relevance and reliability of outcome measures for atopic eczema. The RCT database in this report offers an opportunity for further general research into the relationship between study quality and treatment benefit. Reporting on atopic eczema can be improved by dermatology journals adopting rigorous checks on clinical trial reporting, and by registering ongoing trials with the Cochrane Skin Group.

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