

Offer choice of different emollient types and support their use in children with eczema

Matthew J Ridd (Professor of Primary Health Care, Centre for Academic Primary Care, University of Bristol)
on behalf of the Best Emollients for Eczema study team

The NHS spends over £100 million a year on emollients to treat dry skin conditions like childhood eczema. New, independent research improves our understanding of which to prescribe for eczema and how to improve their use.

About the research

Eczema (or atopic eczema/dermatitis) affects 1 in 5 children in the UK and the majority of children are diagnosed and managed by their GP. It is characterized by dry and itchy skin and the condition can have a significant impact on the physical, psychological and social outlook of the affected child and their family.

Emollients are recommended for all children with eczema but there are over 100 different products. Lack of research in this area means NHS guidelines widely vary in what they recommend GPs and other clinicians should prescribe, which causes confusion and waste.

The Best Emollients for Eczema trial is the first head-to-head comparison of the four main types of emollients prescribed for children with eczema.

Children under 12 years with eczema were randomly assigned to a lotion, cream, gel or ointment to use as their main emollient for 16 weeks, followed by an independent skin examination. All participants and their parents completed an eczema severity questionnaire for a year, and some were interviewed to gain an in-depth understanding of their perceptions and use of the emollients.

This research answers questions about the relative effectiveness and acceptability of different emollients in everyday use in the NHS, and is published as NICE plan to update their 2007 guideline.



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Policy recommendations

Medicine Management/Formulary Teams

- Include at least two emollients of each type of lotion, cream, gel and ointment on prescribing formularies.

Prescribers and pharmacists

- Ensure that parents and older children are aware of the different emollient types and their different characteristics.
- Identify users' priorities and preferences, and use this to help them decide which emollient to try first.
- Give advice (verbal, written and/or online videos) on their purpose and how to use them alongside other treatments.
- Emollients treat the dry skin but any underlying inflammation needs anti-inflammatory preparations such as topical corticosteroids. Some side effects may reflect under-treatment of the inflammation in the skin rather than a problem with the emollient itself.
- Encourage parents and children to give a new emollient a sufficient "trial period" of at least two weeks, unless any major problems with localised skin reactions.
- Suggest parent complete weekly patient-reported outcome measures such as the [Patient Orientated Eczema Measure](#), as this may support emollient use.
- Offer early (4 week) and thereafter regular (6-12 monthly) review of prescribed emollient(s). This may support initial and on-going use, by identifying problems with new emollients or changes in needs as the child grows or their situation changes (e.g. starting school or seasonal effects).

Key findings

- While lotions, creams, gel and ointments were equally effective at treating the symptoms of eczema, no one type was suitable for everyone.
- Individual priorities and preferences informed the acceptability and usability of the same type of emollient. Parents and children made trade-offs between acceptability, frequency of application required, and perceived effectiveness.
- Emollients come in a tube, pump or tub, with people preferring tubes and pumps because they were more practical.
- Application site reactions were common, occurring in around 1 in 3 participants. Frequency of problems such as itching, dryness, or inflammation were similar across all types of emollients.

Further work is needed to determine if these findings apply to adolescents/adults with eczema; people with other dry skin conditions; and whether there are any differences between other paraffin based, non-paraffin and “novel” emollients.

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“I think the lotion that he’s got now soaks in a lot better ... whereas with the thicker one you could put one lot on, you could kind of see it all and know it was going to stay on...”
— Study Participant

“I think it [study cream] seems to be slightly thicker so she’s still putting the same amount on that she would have done with the [pre-study lotion] but it’s actually more appropriate, so you don’t actually need as much.”
— Study Participant

“I was going to say it’s nice, isn’t it, it [study ointment] doesn’t sting your legs, she hasn’t complained ever about it and so that’s, you know, really good from her point of view. I suppose the worst thing about it is the fact that it does mark her clothes.”
— Study Participant

Further information

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Contact the researchers

Matthew Ridd, Professor of Primary Health Care m.ridd@bristol.ac.uk www.bristol.ac.uk/bee-study or [@bee_study](https://twitter.com/bee_study)

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