A randomised placebo-controlled trial of oral and topical antibiotics for children with clinically infected eczema in the community: the ChildRen with Eczema, Antibiotic Management (CREAM) study

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Plain English summary

ChildRen with Eczema, Antibiotic Management (CREAM) study

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Plain English summary

Eczema affects about one in five children in the UK. It tends to come and go, and flare-ups are sometimes triggered by infection. Many doctors give antibiotics for flares, but there is not much evidence to show whether or not they help. The antibiotics can be given as a cream or by mouth.

The ChildRen with Eczema, Antibiotic Management study was designed to find out if antibiotics help improve eczema severity in children with infected eczema flares.

A total of 113 children aged < 8 years, with infected eczema, joined the study. Most children had relatively mild or moderate flares. The bacterium *Staphylococcus aureus* (which causes skin infections) was found on most children's skin. Every child was given one of three treatments for 1 week:

1. oral antibiotics and placebo cream
2. antibiotic cream and placebo oral treatment; or
3. double placebo treatment.

All children also received standard eczema treatment with steroid creams/emollients. We collected details about the child's eczema and their general health, eczema severity, daily symptoms, quality of life and impact on the family.

We found that patients in all groups improved by 2 weeks, but patients in both antibiotic groups had slightly worse eczema scores than the placebo group. The difference may have occurred by chance but we can be fairly confident that antibiotics do not reduce eczema severity by a worthwhile amount. They may even make it worse.

We conclude that most children with less severely infected eczema should not be given antibiotics as long as standard treatment (steroid creams/emollients) is offered.

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