

Evidence Update

Child Health Series

Do bathing, sponging, and fanning help manage fever in children?

Two small trials show that tepid sponging helps to reduce fever in children.

Inclusion criteria

Studies:

Randomized and quasi-randomized controlled trials.

Participants:

Children aged 1 month to 15 years from general paediatric populations with fever of presumed infectious origin, excluding those with a history of recent febrile convulsion.

Intervention:

Physical cooling methods, including sponging, bathing, or fanning (with or without accompanying antipyretic drugs), compared with placebo or no treatment.

Outcomes:

Primary: time for fever to subside.

Secondary: resolution of fever by the first, second, and sixth hour of starting treatment; rate of temperature fall between 30 minutes and 6 hours of treatment; resolution of associated symptoms within 6 hours of starting treatment; febrile convulsions; adverse events.

Results

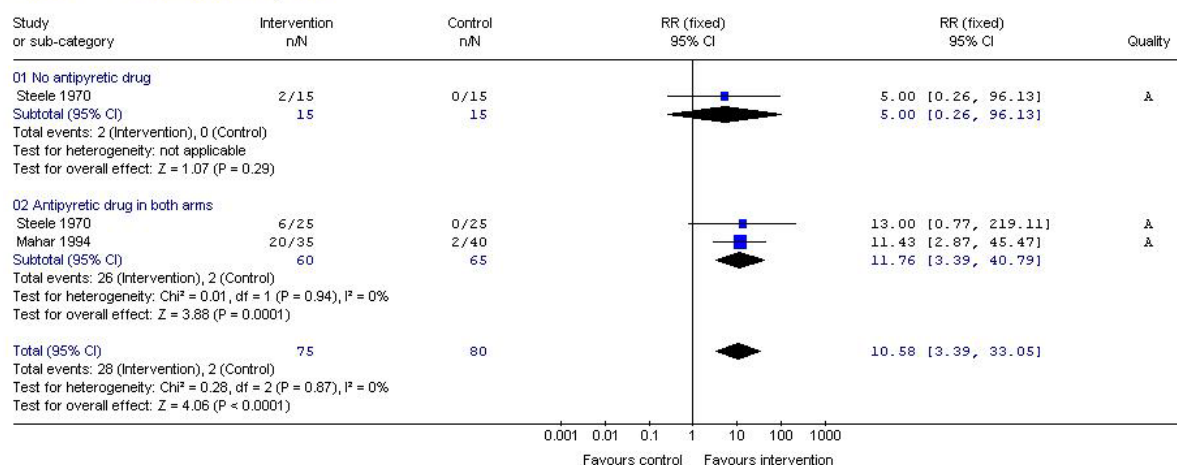
- Seven trials involving 467 children were included. Allocation concealment was adequate in 3 trials.
- In one small trial, no significant difference in fever at 1 hour was detected between children receiving tepid sponging alone and those receiving placebo (1 trial, 30 children).
- In trials where all children received paracetamol, those who were treated with tepid sponging in addition to paracetamol were more likely to be clear of fever at 1 hour (relative risk 11.76; 95% confidence interval 3.39 to 40.79; 2 trials, 125 children).
- Shivering and goose bumps were more common with tepid sponging (relative risk 5.09; 95% confidence interval 1.56 to 16.60; 3 trials, 145 children).



Adapted from Meremikwu M, Oyo-Ita A. Physical methods for treating fever in children. *Cochrane Database of Systematic Reviews* 2003, Issue 2. Art. No.: CD004264. DOI: 10.1002/14651858.CD004264. *Evidence Update* published in November 2007.

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Tepid sponging compared to control: resolution of fever by 1 hour



Authors' conclusions

Implications for practice:

There is limited evidence that sponging reduces fever in children who have also received paracetamol.

Implications for research:

Well-designed trials are needed to further evaluate the possible benefits and harms of physical methods for treating fever in children.