

Summary of findings:


39 Swimming in a chlorinated pool compared to no swimming for treatment chronic suppurative otitis media

Patient or population: Remote Australian Aboriginal children aged 5 to 12 years with chronic suppurative otitis media

Setting: Primary care - remote Australian Aboriginal community.

Intervention: Swimming in a chlorinated pool daily for 4 weeks

Comparison: No swimming.

Outcome № of participants (studies)	Relative effect (95% CI)	Anticipated absolute effects (95% CI)			Quality	What happens
		Without swimming in a chlorinated pool	With swimming in a chlorinated pool	Difference		
Ear discharge / CSOM assessed with: tympanometry, pneumatic & video otoscope follow up: 4 weeks № of participants: 89 (1 RCT) ^{1,a}	RR 0.88 (0.63 to 1.22)	66.7%	58.7% (42.0 to 81.3)	8.0% fewer (NS) (24.7 fewer to 14.7 more)	 LOW ^{b,c}	In remote Australian Aboriginal children with CSOM who swim daily compared to no swimming there is possibly no difference in ear discharge at 4 weeks follow-up. NNT Not Applicable

*The risk in the intervention group (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI).

CI: Confidence interval; RR: Risk ratio; NS: Not significant; NNT: Number needed to treat; NNH: Number needed to harm

GRADE Working Group grades of evidence

High quality: We are very confident that the true effect lies close to that of the estimate of the effect

Moderate quality: We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different

Low quality: Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect

Very low quality: We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect

Explanations

a. Study taken from: Stephen 2013. Note: this data conflicts with observational studies showing significant benefit. Methodology is higher in this study.

b. Indirectness: Unique setting, data cannot be generalised to all children

c. Imprecision: Small study

References

1. Stephen AT, Leach AJ, Morris PS. Impact of swimming on chronic suppurative otitis media in Aboriginal children: a randomised controlled trial. The Medical journal of Australia. 2013;199(1):51-5. Epub 2013/07/09. PubMed PMID: 23829265.