Summary of findings:

33. Topical antibiotics compared to ear toilet alone for chronic suppurative otitis media

Patient or population: Children and adults with chronic suppurative otitis media

Setting: Primary health care

Intervention: Topical antibiotics (Studies used: Oxfloxacin single dose and Ciprofloxacin three times daily for 7 days.)

Comparison: Ear toilet alone

Outcome No. of participants (studies)	Relative effect (95% Cl)	Anticipated absolute effects (95% CI)			Quality	What happens
		Without Topical antibiotics	With Topical antibiotics	Difference		
Persistent discharge assessed with: otoscopy follow up: 1 week № of participants: 197 (2 RCTs) ^{1,a}	RR 0.45 (0.34 to 0.59)	80.8%	36.4% (27.5 to 47.7)	44.4% fewer (53.3 fewer to 33.1 fewer)	LOW b,c,d	In patients with CSOM treated with topical antibiotics compared to ear toilet alone there are possibly fewer children with persistent ear discharge at 1 week follow-up. NNT ~3

*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

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. Studies taken from: Cochrane Review, Macfadyen 2005 (van Hesselt 2002, Kasemsuwan 1997)

b. Risk of Bias: Attrition bias noted (Kasemsuwan) but not rated down

c. Inconsistency: High heterogeneity

d. Imprecision: Small studies / optimal information size not reached.

References

1. Macfadyen CA, Acuin JM, Gamble C. Topical antibiotics without steroids for chronically discharging ears with underlying eardrum perforations. The Cochrane database of systematic reviews. 2005(4):Cd004618. Epub 2005/10/20. doi: 10.1002/14651858.CD004618.pub2. PubMed PMID: 16235370.