42. Single dose Ciprofloxacin compared to prolonged application Ciprofloxacin for the prevention of post-operative tympanostomy tube otorrhoea

Patient or population: Children 3-14 years with rAOm or OME undergoing tympanostomy tube (TTs) insertion.

Setting: Hospital.

Intervention: Single dose Ciprofloxacin post-surgery.

Comparison: Prolonged application Ciprofloxacin for 5 days.

Outcome № of participants (studies)	Relative effect (95% CI)	Anticipated absolute effects (95% CI)			Quality	What happens
		Without single dose Ciprofloxacin	With single dose Ciprofloxacin	Difference		
Post-operative TTO follow up: 2 weeks № of participants: 35 (1 RCT) 1,a	RR 0.71 (0.13 to 3.72)	16.7%	11.8% (2.2 to 62.0)	4.8% fewer (NS) (14.5 fewer to 45.3 more)	VERY LOW b.c	In children with TTs treated with single dose Ciprofloxacin compared to Ciprofloxacin for 5 days post-surgery there is no difference in TTO at 2 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; TTs: tympanostomy tubes; TTO: Tympanostomy tube otorrhoea

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: Cochrane Review, Syed 2013 (Nawasreh 2004)
- b. Risk of Bias: Participants not blinded and unclear if outcome assessor blinded.
- c. Imprecision: Broad estimate of effect. Single, small study.

References

1. Syed MI, Suller S, Browning GG, Akeroyd MA. Interventions for the prevention of postoperative ear discharge after insertion of ventilation tubes (grommets) in children. The Cochrane database of systematic reviews. 2013(4):Cd008512. Epub 2013/05/02. doi: 10.1002/14651858.CD008512.pub2. PubMed PMID: 23633358.