#### Summary of findings:

## 51. Oral corticosteroids compared to placebo for children with tympanostomy tube otorrhoea

Patient or population: Children aged 6 months to 12 years with tympanostomy tube otorrhoea (TTO).

Setting: Primary health care.

Intervention: Oral corticosteroids (Studies used: Prednisolone 2 mg/kg/day divided into 3 equal doses for 3 days).

Comparison: Placebo.

| Outcome<br>№ of participants<br>(studies)   | Relative effect<br>(95% CI)   | Anticipated absolute effects (95% CI) |                              |  | Quality | What happens  |
|---|-------------------------------|---------------------------------------|------------------------------|--|---------|---|
|   |                               | Without Oral corticosteroids          | With Oral corticosteroids    | Difference                                     |         |   |
| Resolution of ear discharge assessed with: physician assessment (when discharge could no longer be suctioned from ear canal) follow up: 2 weeks № of participants: 50 (1 RCT) 1,a | RR 1.08<br>(0.92 to 1.26)     | 88.9%                                 | <b>96.0%</b> (81.8 to 100.0) | 7.1% more (NS)<br>(7.1 fewer to 23.1<br>more)  | LOW b,c | In children with TTO treated with Prednisolone compared to placebo there is possibly no difference in resolution of ear discharge at 2 weeks follow-up.  NNT Not Applicable |
| Adverse events (gastrointestinal) assessed with: parental report follow up: 7 days № of participants: 50 (1 RCT) 1.a  | <b>RR 0.23</b> (0.01 to 4.63) | 7.4%                                  | 1.7%<br>(0.1 to 34.3)        | 5.7% fewer (NS)<br>(7.3 fewer to 26.9<br>more) | LOW b,c | In children with TTO treated with Prednisolone compared with placebo there possibly no difference in adverse events at 1 week follow-up.  NNH Not Applicable.               |

<sup>\*</sup>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. Studies taken from: Cochrane Review, Venekamp 2016 (Ruohola 1999)
- b. Risk of bias: Attrition bias
- c. Imprecision: Small study

### References

1. Venekamp RP, Javed F, van Dongen TM, Waddell A, Schilder AG. Interventions for children with ear discharge occurring at least two weeks following grommet (ventilation tube) insertion. The Cochrane database of systematic reviews. 2016;11:Cd011684. Epub 2016/11/18. doi: 10.1002/14651858.CD011684.pub2. PubMed PMID: 27854381.