

**Limited benefit from grommets for recurrent acute otitis media in children**

---

|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Clinical Question</b>          | How effective is bilateral grommet insertion with or without concurrent adenoidectomy in children with recurrent acute otitis media (rAOM)?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Bottom Line</b>                | Current evidence is limited to five randomised control trials with unclear or high risk of bias. Low to very low-quality evidence suggested that children receiving grommets were less likely to have rAOM at six and 12 months' follow-up compared to those managed by active monitoring and placebo medication, but the magnitude of the effect was modest with around one fewer episode at six months (NNTB=3) and a less noticeable effect by 12 months (NNTB=8). Low-quality evidence suggested that disease-specific quality of life was similar at four and 12 months in children receiving grommets and those managed by active monitoring. It was uncertain whether or not grommets were more effective than antibiotic prophylaxis. The risk of persistent tympanic membrane perforation after grommet insertion was low (low-quality evidence). |
| <b>Caveat</b>                     | Widespread use of pneumococcal vaccination has changed the bacteriology and epidemiology of AOM. All the trials in this review were conducted prior to the introduction of the vaccine. There were insufficient data to determine whether presence of middle ear effusion at randomisation, type of grommet or age modified the effectiveness of grommets. In none of the studies was adenoidectomy performed concurrently in both groups.                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Context</b>                    | AOM is one of the most common childhood illnesses. While many children experience sporadic AOM episodes, an important group suffer from rAOM, defined as three or more episodes in six months, or four or more in one year. In this subset of children AOM poses a true burden through frequent episodes of ear pain, general illness, sleepless nights and time lost from nursery or school. Grommets, also called ventilation or tympanostomy tubes, can be offered for rAOM.                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Cochrane Systematic Review</b> | Venekamp RP et al. Grommets (ventilation tubes) for recurrent acute otitis media in children. Cochrane Reviews, 2018, Issue 5. Art. No.: CD012017.DOI: 10.1002/14651858.CD012017.pub2. This review contains five studies involving 805 participants.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

---

**Pearls No. 608, February 2019, written by Brian R McAvoy. C16**

---

Systematic review link:

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD012017.pub2/full>