

# GUIDELINES & PROTOCOLS

## ADVISORY COMMITTEE

### Otitis Media with Effusion (OME)

Revised 2004

#### Scope

Otitis media with effusion (OME) is defined as the presence of fluid in the middle ear without signs and symptoms of an ear infection.<sup>1</sup>

This guideline applies to otherwise healthy children over the age of three months presenting with OME. It does not include children with craniofacial abnormalities, immune deficiencies, complications of acute otitis media (AOM) (e.g. mastoiditis, facial paralysis, etc.) or serious underlying disease. Refer to the Acute Otitis Media (AOM) guideline for children with AOM.

#### RECOMMENDATION 1 Distinguish between OME and AOM

Children with OME present with no evidence of acute inflammation despite visible fluid or reduced mobility on pneumatic otoscopy.<sup>1</sup> The ear is not acutely painful, but the child may have ear discomfort and/or hearing loss.

Children with AOM present with combinations of ear pain (otalgia), loss of landmarks, and an opaque, bulging, inflamed tympanic membrane on direct otoscopy.

#### RECOMMENDATION 2 Initial management of OME<sup>1,2</sup>

If a child has OME, attempt to determine the length of time the effusion has been present. If the history obtained from the patient or parent suggests the effusion has been present for less than 12 weeks, re-examine the child on a six week basis. If the effusion has been present for 12 or more weeks, see Recommendation 3.

**Note: Decongestants, antihistamines, steroids, and antibiotics are not recommended in the treatment of OME.<sup>2</sup>**

#### RECOMMENDATION 3 When OME has been present for 12 or more weeks

A formal hearing evaluation and referral to an otolaryngologist should occur.<sup>2</sup>

## Rationale

Otitis media with effusion (OME) is one of the most common illnesses of childhood and is often preceded by an attack of AOM. OME is associated with ear discomfort, hearing loss and recurrences of acute otitis media (AOM). OME frequently is preceded by an episode of AOM and may take more than three months to clear. After an episode of AOM, fluid will be present in 50 per cent of patients after one month, in 25 per cent of patients after two months, and in 10 per cent of patients at three months.<sup>1</sup>

Monitoring and treatment of persistent OME has a number of goals. Language delay may be associated with OME and hearing loss. Treatment of this condition may promote age appropriate language development, although this treatment outcome has recently been challenged.<sup>3</sup> Surgical treatment of chronic OME may prevent middle ear complications, such as atelectatic tympanic membrane, permanent conductive hearing loss, cholesteatoma, etc.

Medical treatment options for OME are generally ineffective. Antibiotics may hasten the resolution of OME in only 14 per cent of cases.<sup>1,2</sup> Other interventions such as decongestants, antihistamines, steroids<sup>4</sup> have shown no benefit and should not regularly be used to treat this condition.

Recommendations in this guideline are consistent with the recently published guideline from the American Academy of Pediatrics.<sup>5</sup>

## References

1. Alberta Medical Association. Guideline for the diagnosis and treatment of acute otitis media in children. *Alberta Clinical Practice Guidelines Program* 2000.
2. American Academy of Pediatrics. Otitis Media Guideline Panel. Managing otitis media with effusion in young children. *Pediatrics* 1994;94:766-793.
3. Rovers MM, Ingels K, van der Wilt GJ, Zielhuis GA, van den Broek P. Otitis media with effusion in infants: Is screening and treatment with ventilation tubes necessary? *CMAJ* 2001;165:1055-1056.
4. Bulter CC, van der Voort JH. Steroids for otitis media with effusion: A systematic review. *Arch Pediatr Adolesc Med* 2001;155:641-647.
5. American Academy of Pediatrics. Otitis Media With Effusion. *Pediatrics* 2004; 113:1412-1428.

## Sponsors

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This guideline is based on scientific evidence current as of the effective date.

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