The Scottish Intercollegiate Guidelines Network (SIGN) supports improvement in the quality of health care for patients in Scotland by developing national clinical guidelines containing recommendations for effective practice based on current evidence.

The recommendations are graded A, B, C, D to indicate the strength of the supporting evidence.

Good practice points are provided where the guideline development group wishes to highlight specific aspects of accepted clinical practice.

Details of the evidence supporting these recommendations and their application in practice can be found in the full guideline, available on the SIGN website: www.sign.ac.uk

This guideline was issued in 2003 and will be considered for review as new evidence becomes available.

For more information about the SIGN programme, contact the SIGN Executive or see the website.

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DIAGNOSIS AND MANAGEMENT OF CHILDHOOD OTITIS MEDIA IN PRIMARY CARE

This Quick Reference Guide provides a summary of the main recommendations in the SIGN guideline on the diagnosis and management of childhood otitis media in primary care. The aim of this national guideline is to provide guidance about detection, management, referral and follow up of children with these conditions.

In terms of morbidity in children in general practice, middle ear conditions are probably the most important relating to the upper respiratory tract, with 75% of all cases of acute otitis media (AOM) occurring in children under the age of 10 years. One in four children will have an episode of AOM at some time during the first 10 years of life with a peak incidence of diagnosis occurring between the ages of three and six. The prevalence of otitis media with effusion (OME), commonly referred to as glue ear, is very high (around 80% of children are reported to have OME at least once before the age of four) and this condition has important implications for child development.

DEFINITIONS

AOM: inflammation of the middle ear of rapid onset presenting most often with local symptoms (the two most common being earache and rubbing or tugging of the affected ear) and systemic signs (fever, irritability and poor sleep for example). There may be a preceding history of upper respiratory symptoms including cough and rhinorrhea.

OME: inflammation of the middle ear, accompanied by the accumulation of fluid in the middle ear cleft without the symptoms and signs of acute inflammation. OME is often asymptomatic, and earache is relatively uncommon.

CLINICAL ASSESSMENT

- In most situations, the GP will have to depend on history and otoscopy for diagnosing otitis media.
- Children who require hearing loss assessment should be referred to an audiologist.
### Diagnostic features of AOM and OME

<table>
<thead>
<tr>
<th></th>
<th>Earache</th>
<th>Fever</th>
<th>Irritability</th>
<th>Middle ear effusion</th>
<th>Opaque drum</th>
<th>Bulging drum</th>
<th>Impaired drum mobility</th>
<th>Hearing loss</th>
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</thead>
<tbody>
<tr>
<td><strong>AOM</strong></td>
<td>present</td>
<td></td>
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<td>present</td>
<td>present</td>
<td>may be present</td>
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<td><strong>OME</strong></td>
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### TREATMENT FOR AOM

In the majority of cases AOM is a self limiting condition.

#### Antibiotics for AOM

**B** Children diagnosed with acute otitis media should not routinely be prescribed antibiotics as the initial treatment.

**B** If an antibiotic is to be prescribed, the conventional five day course is recommended at dosage levels indicated in the British National Formulary.

#### Decongestants, antihistamines and mucolytics

**A** Children with AOM should not be prescribed decongestants or antihistamines.

#### Analgesics

**D** Parents should give paracetamol for analgesia but should be advised of the potential danger of overuse.

#### Oils

**B** Insertion of oils should not be prescribed for reducing pain in children with AOM.

#### Homeopathy

There is insufficient evidence available to recommend homeopathy in the management of AOM (or OME).

### TREATMENT FOR OME

In the majority of cases OME is a self limiting condition.

#### Antibiotics for OME

**D** Children with otitis media with effusion should not be treated with antibiotics.

#### Decongestants, antihistamines and mucolytics

**B** Decongestants, antihistamines or mucolytics should not be used in the management of OME.

#### Steroids

**B** The use of either topical or systemic steroid therapy is not recommended in the management of children with OME.

#### Autoinflation

**D** Autoinflation may be of benefit in the management of some children with OME.

### REFERRAL FOR OME PATIENTS

**A** Children under three years with persistent bilateral otitis media with effusion and hearing loss of ≤25dB, but no speech and language, development or behavioural problems, can be safely managed with watchful waiting.

If watchful waiting is being considered, the child should undergo audiometry to exclude a more serious degree of hearing loss.

**B** Children with persistent bilateral otitis media with effusion who are over three years of age or who have speech and language, developmental or behavioural problems should be referred to an otolaryngologist.