

Glue Ear (OME)

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Overview

- What is glue ear?
- Aetiology
- Presentation
- Diagnosis
- When to refer
- Management



Otitis Media with Effusion/Glue Ear

- Collection of serous/mucoid fluid within middle ear
- No signs of acute inflammation
- 1 - 6 years old
- winter months.
- resolves within 3 months
- can recur
- 5-10% of cases last > a year.
- occur
 - after acute otitis media
 - persists secondary to impaired eustachian tube function
 - persistent inflammation or low grade infection.



Presentation in children

- Hearing loss
- Intermittent mild ear pain with fullness/popping.
- history of
 - recurrent ear infection,
 - URTIs
 - or nasal obstruction.

On examination:

Opacification of drum and/or retraction

(occasionally bulging)

Fluid level/bubbles

Loss of light reflex/more diffuse

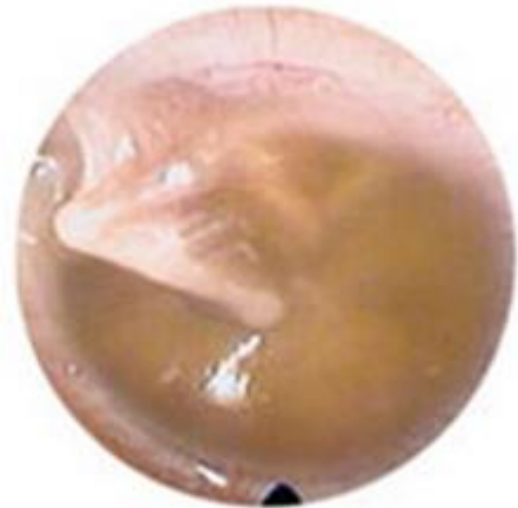
Minimal inflammation or discharge.



Normal Ear
(no fluid)



Some Fluid
(air-fluid levels)



Effusion
(full of fluid)

Diagnosis

Table 1 . The diagnostic features of acute otitis media and otitis media with effusion.

Symptom or sign	Acute otitis media	Otitis media with effusion
Earache, fever, or irritability	√	Usually absent
Middle ear effusion	√	√
Opaque drum	√	May be absent
Bulging drum	May be √	Usually absent; drum is often retracted
Impaired drum mobility	√	√
Hearing loss	√ but not the predominant symptom	Usually √

Management

- Active observation 2-3 months
- Reassurance and parental advice *
- No need for
 - antibiotics,
 - steroids,
 - antihistamines
 - or decongestants
- If persisting after 3 months refer for audiometry testing or ENT opinion.
- An ENT opinion is also required if
 - There is severe hearing loss
 - There is significant impact on development
 - In children with Down syndrome or cleft palate
 - Features suggest an alternative diagnosis
 - ? Cholesteatoma



Following referral to



- Further observation - repeated hearing tests
- Hearing aids
- Auto-inflation techniques



- Surgery
 - insertion of ventilation tubes (grommets) improves hearing in children with (OME) for up to 12 months after surgery,
 - but effect diminishes from 6 months onwards
 - no evidence that language or speech development is improved.

(see [Criteria for commissioning grommets in children](#))

In adults

- OME suspicious !
 - particularly if unilateral.
- Eustachian tube dysfunction
 - severe sinusitis,
 - recurrent URTI
 - chronic allergy.
- Other causes include
 - Post radiotherapy or surgery
 - Nasopharyngeal Ca
 - Severe septal deviation
 - Barotrauma
- (see Criteria for commissioning grommets in adults) *



