

Surgical Treatment of Otitis Media: Grommets and Adenoidectomy

Scope

This policy covers surgical treatment of otitis media (otitis media with effusion and acute otitis media) with Grommets and Adenoidectomy. This policy does not apply to other indications or the treatment of emergency cases presenting in hospital due to complications of otitis media.

Policy

It is the responsibility of referring and treating clinicians to ensure compliance with this policy. Referral proforma should be attached to the patient notes to aid the clinical audit process and provide evidence of compliance with the policy. For patients not meeting the policy criteria, clinicians can apply for funding to the Exceptional Cases Panel by completing the exceptional funding section of the [referral proforma](#).

Children and Adults

The CCG will fund treatment with grommets (with/without adenoidectomy as a single episode of care) for children and adults with persistent bilateral otitis media with effusion (OME) where:

- The hearing level in the better ear is 25–30 dBHL (decibels hearing level) or worse averaged at 0.5, 1, 2 and 4 kHz (or equivalent dBA where dBHL not available). This should be confirmed on two occasions separated by 3 months or more (results of initial formal testing and tests done after at least 3 months should be included in the referral letter).¹

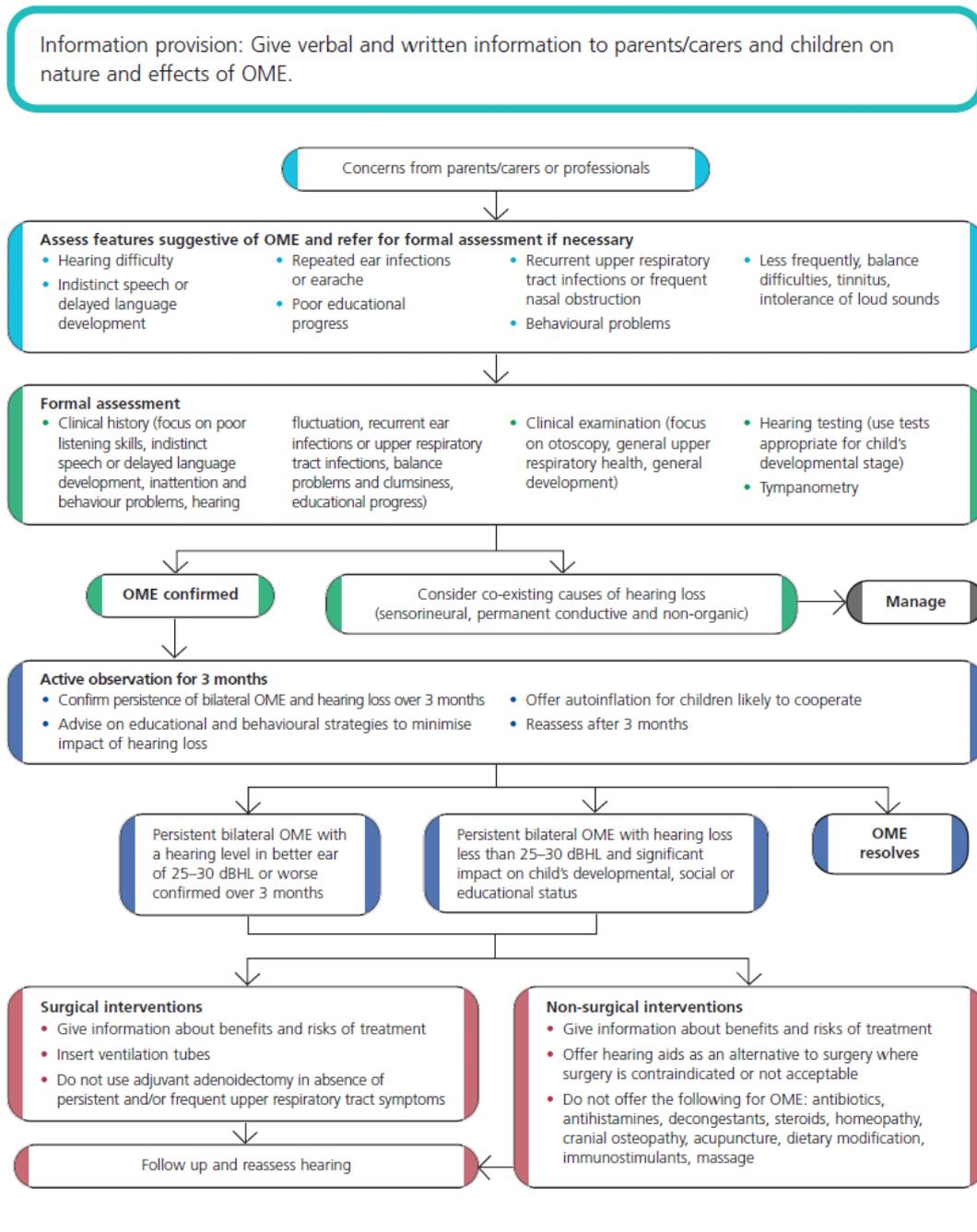
Funding will also be agreed if:

- A child has persistent bilateral OME with a hearing loss less than 25–30 dBHL where the impact of the hearing loss on a child's developmental or educational status (eg speech delay) has been demonstrated to be significant¹ (evidence to be provided).
- A second disability such as Down's Syndrome or cleft palate (insertion of ventilation tube should be offered only as an alternative to hearing aids).
- OME is overlaying sensorineural deafness or is delaying diagnosis or treatment with hearing aids or cochlear implants.

The following interventions are not routinely funded for cases of otitis media and funding is only granted via application to the exceptional cases panel:

- Insertion of grommets for otitis media in the absence of effusion.
- Adenoidectomy as a stand-alone procedure.

NICE Care Pathway: Children Suspected with OME¹



Note: Under the above pathway 'Active observation for 3 months': Otovent auto inflation device is available to purchase over the counter from local community pharmacies. Self-care should be promoted where the patient is willing and able in line with the [CCG self-care policy](#).

Evidence and Rationale

Acute otitis media (AOM) is one of the most common childhood illnesses and 80% of children will have experienced at least one episode before they are 3 years old² and 40% will have six or more recurrences by the age of seven years.³ Children are particularly at risk because of their horizontally placed Eustachian tube (provides ventilation to the middle ear) compared with adults⁴, but as they get older these difficulties resolve.

Grommets for otitis media with effusion

Trials have shown that grommets offer short-term (6 months) hearing improvement in children with otitis media with effusion (OME) but have no effect on language or speech development or longer-term hearing compared with no surgery.⁵ Following grommet surgery, a third of children had tympanosclerosis and there was a high incidence of post-surgical otorrhoea (discharge from the ear) in children <3 years.⁵ 50% of children with a bilateral hearing loss of at least 20dB are likely to recover to normal with no treatment in the first three months after diagnosis⁶ and watchful waiting may, therefore, be the most appropriate treatment in most children.

NICE recommended a period of observation of hearing loss (with accurate audiometry) and its impact on the child's development over 3 months¹ in order to determine whether resolution occurs or if further treatment was required.

Grommets for acute otitis media

Trials in children with acute otitis media (AOM) suggest a short-term benefit of grommets⁷ but the quality of the evidence is low. The best treatment for recurrent AOM without effusion is currently uncertain.⁷

Cleft palate and Down's syndrome

Children with cleft palate are particularly susceptible to OME because of the impaired function of the Eustachian tube that results from the palatal anomaly, which in turn leads to a failure of middle ear ventilation. Similarly, children with Down's Syndrome have a high incidence of OME, partly because of their impaired immunity and mucosal abnormality, with resulting susceptibility to ear infection. These groups of children need particular surveillance for OME so that proper action can be taken. Clinical pathways specific to these children can be found in NICE Guidance CG60.¹

Grommets for otitis media in young people and adults

A review of the treatment of Eustachian tube dysfunction (a cause of otitis media) in adults found no RCTs of surgical interventions and no studies of any kind investigating the effectiveness of grommet insertion for Eustachian tube dysfunction.⁸ There are a number of other pathologies that may be related to otitis media in adults.⁹ Since evidence of the effectiveness of grommets in adults is lacking, evidence from children may be considered applicable and the same policy applied.

Adenoidectomy in addition to grommets

In RCTs where adenoidectomy with grommets has been compared with grommets alone in children with AOM, most show no additional benefit of adenoidectomy when done in conjunction with grommet surgery.¹⁰⁻¹⁵ NICE do not recommend adjuvant adenoidectomy in the absence of persistent and/or frequent upper respiratory tract symptoms in children with OME.¹

References

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Glossary

Acute Otitis Media:	Inflammation in the middle ear, associated with effusion (fluid) and accompanied by the rapid onset of symptoms and signs of an ear infection.
Adenoidectomy:	Surgical removal of the adenoids. Adenoids are an overgrowth of tissue at the back of the throat, into which the nose opens.
Down's Syndrome:	A genetic disorder in which the affected person usually carries an extra chromosome - 47 instead of the usual 46.
Effusion:	Collection of fluid within the middle ear space.
Grommet:	A small bobbin-shaped tube used to keep open the incision made in the ear drum in the treatment of secretory otitis media. It acts as a ventilation tube by allowing the Eustachian tube to recover its normal function.
Otitis Media with effusion:	Collection of fluid within the middle ear, but not associated with symptoms and signs of an acute ear infection. Also known as 'glue ear'.
Otorrhoea:	Discharge from the ear.
Tympanosclerosis:	A pathological hardening or thickening of the ear drum.

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