

31. Myringotomy/grommets/Otitis Media with Effusion

Treatment	Myringotomy / grommets / otitis media with effusion (OME)
Background	<p>Glue ear is a common childhood condition where the middle ear becomes filled with fluid (otitis media with effusion or OME). At least 50% of OME causing bilateral hearing loss of at least 20dB will resolve spontaneously within 3 months therefore a period of watchful waiting for at least 3 months is required. Parents should be advised on educational and behavioural strategies to minimise the effects of hearing loss.</p> <p>Treatment is usually only recommended when symptoms last longer than three months and the hearing loss is thought to be significant enough to interfere with a child's speech and language development.</p> <p>For children with recurrent severe middle ear infections, grommets can be inserted into the eardrum under GA to help drain fluid, as a day case procedure, which helps keep the eardrum open for several months. As the eardrum starts to heal, the grommet will slowly be pushed out of the eardrum and will eventually fall out, usually within 6 to 12 months. This process happens naturally and should not be painful.</p>
Commissioning position	<p>NHS Vale of York CCG will commission myringotomy/grommets for children aged between 3 and 12 years old with bilateral otitis media with effusion (OME) under the following circumstances:</p> <ul style="list-style-type: none"> • documented, persistent, bilateral OME for at least 3 months AND • documented persistent hearing loss on 2 occasions at intervals of 3 months or more AND • hearing in the better ear of 25-30 dBHL or worse (less) <p>There must be a period of at least 3 months watchful waiting from the date of the first appointment with an audiologist</p> <p>AND the child suffers from at least one of the following:</p> <ul style="list-style-type: none"> • At least 5 recurrences of acute otitis media in a year (or 3 in 6 months) • Evidence of significant delay in speech development • Evidence of significant educational or behavioural problems attributable to persistent hearing loss • Hearing level in the better ear of 25-30 dBHL (averaged at 0.5, 1, 2 & 4 kHz) or worse (or equivalent dBH where dBHL not available) • Hearing loss of less than 25-30 dBHL with significant impact on the child's development, social or educational status • A significant second disability such as Down's syndrome or cleft palate <p>NB: In children with additional disabilities such as Down's Syndrome or cleft palate, involvement of a specialist multidisciplinary team with expertise in assessing and treating OME in these children is essential¹.</p> <p>Urgent referral is advised in the following circumstances</p>

	<ul style="list-style-type: none"> • Suspicion of cholesteatoma (atypical features and persistent foul discharge) • OME is complicating sensorineural deafness (eg with excessive hearing loss) or is delaying diagnosis or the patient has treatment with aids or cochlear implants (this would be an indication for immediate grommets) <p>NB: Do not perform adenoidectomy at the same time unless evidence of significant upper respiratory tract symptoms</p> <p>Patient information leaflet operations for glue ear Shared Decision Making Aids for Glue Ear</p>
<p>Summary of evidence /rationale</p>	<p>At least 50% of otitis media with effusion (OME) causing bilateral hearing loss of at least 20dB will resolve spontaneously within 3 months therefore a period of watchful waiting for at least 3 months is required¹. Parents should be advised on educational and behavioural strategies to minimise effects of hearing loss. The RCS guidance also states that care should be provided via an integrated care pathway, which should include “prevention through public health programmes to decrease exposure to cigarette smoke during infancy and childhood”¹.</p> <p>NHS choices points out that factors which increase the risk of getting glue ear include²:</p> <ul style="list-style-type: none"> • growing up in a household where adults smoke • being bottlefed rather than breastfed as a baby <p>NICE CKS³ points out that</p> <ul style="list-style-type: none"> • OME has a very good prognosis. It is a self-limiting illness and 90% of children will have complete resolution within 1 year. • Active observation for several months (previously known as 'watchful waiting') rarely results in long-term complications. • There is no proven benefit from treatment with any medications or any complementary or alternative therapies. <p>NICE clinical guideline 60⁴ supports the above criteria and covers:</p> <ul style="list-style-type: none"> • The surgical management of OME in children younger than 12 years. • Guidance for managing OME in children with Down's syndrome and in children with all types of cleft palate. <p>It does not specifically look at the management of OME in:</p> <ul style="list-style-type: none"> • Children with other syndromes (for example, craniofacial dysmorphism or polysaccharide storage disease). • children with multiple complex needs. <p>The NICE pathway is available at here⁵.</p> <p>A Cochrane review⁶ concluded in 2010 that “In children with OME the effect of grommets on hearing, as measured by standard tests, appears small and diminishes after six to nine months by which time natural resolution also leads to improved hearing in the non-surgically treated children. No effect was found on</p>

	<p>other child outcomes but data on these were sparse. No study has been performed in children with established speech, language, learning or developmental problems so no conclusions can be made regarding treatment of such children.”</p> <p>NB: Leeds health pathways include the following rarer indications for grommets http://www.lhp.leedsth.nhs.uk/common/guidelines/detail.aspx?ID=2518#appa2</p> <ul style="list-style-type: none"> • Severe otalgia in otitis media requiring admission, and unresolved with conservative treatment over 3 days • In immunocompromised patients with otitis media where microbiologic specimens are required • Complications of otitis media such as meningitis, facial nerve paralysis, coalescent mastoiditis, or brain abscess • Chronic retraction of the tympanic membrane • Adults with otitis media with effusion where conservative management has failed over 6 weeks or where malignancy is suspected • Autophony due to patulous eustachian tube • As part of treatment for vestibular disorders either alone or with gentamicin
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References:

1. Royal College of Surgeons - Commissioning guide: Otitis media with effusion (2013) <https://www.rcseng.ac.uk/standards-and-research/nscc/commissioning-guides/topics/>
2. NHS Choices – Glue ear <http://www.nhs.uk/Conditions/Glue-ear/Pages/Introduction.aspx>
3. NICE CKS Otitis media with effusion (2011) <http://cks.nice.org.uk/otitis-media-with-effusion#!scenario>
4. NICE Clinical Guideline 60 Otitis media with effusion in under 12s: surgery (2008) <http://www.nice.org.uk/guidance/CG60>
5. NICE Pathway – Surgical management of Otitis Media with effusion in children (2012). [OME with effusion pathway](#)
6. Cochrane Ear, Nose and Throat Disorders Group 2010. Grommets (ventilation tubes) for hearing loss associated with otitis media with effusion in children <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD001801.pub3/abstract>