Hertfordshire and West Essex Integrated Care System

NHS Hertfordshire and West Essex Integrated Care Board

Evidence Based Intervention

Grommets for glue ear in children

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Policy:

This is a national Evidence Based Intervention policy formally adopted by Hertfordshire and West Essex Integrated Care Board. Please see https://ebi.aomrc.org.uk/

This is a surgical procedure to insert tiny tubes (grommets) into the eardrum as a treatment for fluid build-up (glue ear) when it is affecting hearing in children.

Glue ear is a very common childhood problem (4 out of 5 children will have had an episode by age 10), and in most cases it clears up without treatment within a few weeks. Common symptoms can include earache and a reduction in hearing.

Often, when the hearing loss is affecting both ears it can cause language, educational and behavioural problems.

Please note this guidance only relates to children (under 12s) with glue ear (otitis media with effusion) and SHOULD NOT be applied to other clinical conditions where grommet insertion should continue to be normally funded, these include:

- Recurrent acute otitis media.
- Atrophic tympanic membranes.
- Access to middle ear for transtympanic
- instillation of medication.
- Investigation of unilateral glue ear in adults.

This policy should be used in the context of the overall care pathway and when all alternative interventions that may be available locally have been undertaken.

Criteria:

The NHS should only commission the surgical management of glue ear in children aged under 12 when these criteria are met:

- Have had specialist audiology and ENT assessment, including clinical examination, a hearing test and typanometry, with a reassessment 3 months later. *
- Assessment and reassessment indicate:
    - Persistent bilateral otitis media with effusion.
    - Unilateral hearing loss if hearing is impacting daily living or communication.
- Received advice on strategies to minimise the impact of hearing loss both at home and in educational settings.

- Non-surgical management has been considered, such as air or bone conduction devices and /or auto-inflation.

- That the benefits and risks of grommets has been discussed with the child and their parents and carers, and a shared decision has been made on use. The risk of perforation of the eardrum, localised atrophy, tympanosclerosis and infection associated with grommets has been explained.

- Surgical intervention should be considered in children who cannot undergo standard hearing assessments where there is clinical and tympanographic evidence of persistent glue ear, and where the impact of the hearing loss on a child's developmental, social or educational status is judged to be significant. The guidance is different for children with Down's Syndrome and cleft palate, these children may be offered grommets after a specialist MDT assessment in line with NICE guidance.

- It is also good practice to ensure glue ear has not resolved once a date of surgery has been agreed, with tympanometry as a minimum.

* In children who are experiencing hearing difficulties that significantly affect day-to-day living, consider intervening earlier than the 3-month reassessment.

When planning grommet surgery for the management of glue ear, you may wish to consider an adjuvant adenoidectomy (unless assessment indicates an abnormality with the palate). Please see the accompanying EBI guidance '[Removal of adenoids for treatment of glue ear]'.

Rationale for Recommendation

In most cases glue ear will improve by itself without surgery and glue ear without an impact on hearing, no matter if persistent or transient, does not require surgery. However, reduced hearing levels even for only short periods of time can significantly impact a child's development. During a period of monitoring of the condition a balloon device (e.g. Otovent) can be used by the child if tolerated, this is designed to improve the function of the ventilation tube that connects the ear to the nose. In children with persistent glue ear affecting hearing, a hearing aid is another suitable alternative to surgery. Only very low-quality evidence suggests that early grommet insertion leads to improved hearing in the short-term compared with non-surgical management, however no difference is seen in the medium or long-term. The risks of grommet surgery are generally low but can result in later complications impacting the child's development. The most common is persistent ear discharge (10-20%), which can require treatment with antibiotic eardrops and water precautions. In rare cases (1-2%) a persistent hole in the eardrum may remain. If this causes problems with recurrent infection surgical repair may be required, however this is not normally done until around 8-10 years of age. It is therefore important to weigh up the potential benefits of grommet insertion against the risks.

The NHS should only commission this surgery when the NICE criteria are met, as performing the surgery outside of these criteria is unlikely to derive any clinical benefit.

Patient Information

Information for Patients
Surgically inserting grommets (small temporary tubes) helps to let air into the middle part of the ear, allowing fluid (glue ear) to resolve but, should only be carried out when specific criteria are met. This is because the medical evidence tells us that the intervention in children under 12 can sometimes do more harm than good and the symptoms usually clear up of their own accord.

About the condition
Glue ear is a very common childhood problem that affects about four in five children by the age of ten. In most cases, it clears up without treatment in a few weeks. Common symptoms can include earache and a reduction in hearing. If the hearing loss is affecting both ears it can cause language, educational and behavioural problems. The procedure generally should only be considered if your child has at least three months of persistent hearing loss in both ears.

It's important you and your doctor make a shared decision about what's best for your child if they have glue ear. When making that decision you should both consider the benefits, the risks, the alternatives and what will happen if you do nothing.

What are the BENEFITS of the intervention?
The insertion of grommets can be beneficial in certain circumstances. If the hearing loss is affecting both ears and it is persistent, treatment may help prevent challenges your child might face as a result of hearing loss.

What are the RISKS?
The insertion of grommets can be uncomfortable for children. As with most procedures there is the risk of infection and bleeding. There is also a small risk the ear drum could be perforated during the procedure.

What are the ALTERNATIVES?
A simple solution which can sometimes alleviate the problem is to encourage your child to swallow while keeping their nostrils tightly closed. Your doctor may also prescribe a small balloon which is specifically designed to help glue ear by blowing it up the nose. Only a balloon designed for this purpose should be used. Temporary hearing aids could also be worn whilst waiting for symptoms to improve.

What if you do NOTHING?
Doing nothing is usually the best course of action. Most children get better within a few weeks without any treatment.

Further information can be found at https://ebi.aomrc.org.uk/interventions/grommets-for-glue-ear-in-children/ This weblink was correct as of 27/11/2024.

Coding

WHEN Primary_Spell_Procedure IN ('D151')
AND (Primary_Spell_Diagnosis like 'H65[2349]%' OR Primary_Spell_Diagnosis like H66[012349]%')
AND Any_Spell_Diagnosis NOT LIKE '%H90[12678]%'
AND Any_Spell_Diagnosis NOT LIKE '%H91[89]%'
-- Age between 0 and 18
AND (ISNULL(APCS.Age_At_Start_of_Spell_SUS,APCS.Der_Age_at_CDS_Activity_Date) between 0 AND 11 OR
ISNULL(APCS.Age_At_Start_of_Spell_SUS,APCS.Der_Age_at_CDS_Activity_Date) between 7001 AND 7007)
-- Only Elective Activity
AND APCS.Admission_Method not like ('2%')
THEN 'G_grom

Exclusions

WHERE 1=1
-- Cancer Diagnosis Exclusion
AND (Any_Spell_Diagnosis not like '%C[0-9][0-9]%'
AND Any_Spell_Diagnosis not like '%D0%'
AND Any_Spell_Diagnosis not like '%D3[789]%'
AND Any_Spell_Diagnosis not like '%D4[012345678]%'
OR Any_Spell_Diagnosis IS NULL)

-- Private Appointment Exclusion
AND apcs.Administrative_Category<>'02'

References

1. NICE guidance [NG233] (2023) Otitis media with effusion in under 12s. https://www.nice.org.uk/guidance/ng233
2. NICE guideline NG233 Evidence Review [E] (2023) Otitis media with effusion in under 12s [E] Evidence review for ventilation tubes. https://www.nice.org.uk/guidance/ng233/evidence/e-ventilation-tubes-pdf-13133198706
3. NICE guideline NG233 Supplement 2: Decision Table (2023). Otitis media with effusion in under 12s. Decision table. https://www.nice.org.uk/guidance/ng233/evidence/supplement-2-decision-table-pdf-13133202590
4. Browning G, Rovers M, Williamson I, Lous J, Burton MJ. (2010) Grommets (ventilation tubes) for hearing loss associated with otitis media with effusion in children. Cochrane Database of Systematic Reviews. Issue 10. Art. No.: CD001801. doi: 10.1002/14651858.CD001801.pub3
5. MacKeith S, Mulvaney CA, Galbraith K, Webster KE, Connolly R, Paing A, Marom T, Daniel M, Venekamp RP, Rovers MM, Schilder AGM. (2023) Ventilation tubes (grommets) for otitis media

with effusion (OME) in children. Cochrane Database of Systematic Reviews. Issue 11. Art. No.: CD015215. DOI: 10.1002/14651858.CD015215.pub2.
https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD015215.pub2/full

Change History:

Version	Date	Reviewer(s)	Revision Description

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