National Collaborating Centre for Women's and Children's Health

# Surgical management of otitis media with effusion in children

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## Surgical management of otitis media with effusion in children

National Collaborating Centre for Women's and Children's Health

Commissioned by the National Institute for Health and Clinical Excellence

**Excluded studies** 

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Management in children with Down's syndrome and children with cleft palate	33

#### **Clinical presentation**

Reference ID	Bibliographic Information	Reason For Rejecting
{36946}	Title: Secretory otitis media and hearing loss Authors: Sorri M; Journal: Acta Oto-Laryngologica Supplement Year: 1989	Population not relevant for the guideline question - children above 12 years
{36947}	Title: Lasting effects of otitis media with effusion on language skills and listening performance Authors: Klausen O; Journal: Acta Oto-Laryngologica Supplement Year: 2000	Population not relevant for the guideline question - children with VT inserted
{36948}	Title: Quality of life and psycho-social development in children with otitis media with effusion Authors: Bellussi L; Journal: Acta Otorhinolaryngologica Italica Year: 2005 Dec	Poorly conducted survey with selection bias, recall bias, observer bias and confounding variables not adjusted.
{36949}	Title: Association of early bilateral middle ear effusion with language at age 5 years Authors: McCormick DP; Journal: Ambulatory Pediatrics Year: 2001 Mar	Better quality evidence (meta-analysis) already included
{36950}	Title: Early middle ear effusion and school achievement at age seven years Authors: McCormick DP; Journal: Ambulatory Pediatrics Year: 2006 Sep	Poor quality study - population not representative, high drop out rate, outcome not measured in a reliable manner, blinding not specified
{36951}	Title: The effects of chronic otitis media on motor performance in 5- and 6-year-old children Authors: Von T; Journal: American Journal of Occupational Therapy Year: 1988 Jul	Population not relevant for the guideline question - children with VT inserted
{36953}	Title: Otitis media and language development: a meta- analysis Authors: Casby MW; Journal: American Journal of Speech-Language Pathology Year: 2001	Poorly conducted meta-analysis - methodology not described in details, quality appraisal of studies not done, pooling of heterogeneous studies and results without any description
{36954}	Title: Recurrent middle ear effusion in childhood: implications of temporary auditory deprivation for language and learning Authors: Sak RJ; Journal: Annals of Otology, Rhinology and Laryngology Year: 1981 Nov	Poor quality case-control study - selection bias, no control for confounding variables, no blinding of outcome assessors
{36955}	Title: Visual-induced postural sway in children with and without otitis media Authors: Casselbrant ML; Journal: Annals of Otology, Rhinology and Laryngology Year: 1998 May	Study not relevant for the guideline question as looking at test results of postural sway and not the presenting features

Reference ID	Bibliographic Information	Reason For Rejecting
{36956}	Title: Behaviour and developmental effects of otitis media with effusion into the teens Authors: Bennett KE; Journal: Archives of Disease in Childhood Year: 2001 Aug	Not relevant for the guideline question - long term sequelae and population has children with VT inserted.
{36957}	Title: The effect of conductive hearing loss on phonological awareness, reading and spelling of urban aboriginal students Authors: Walker N; Journal: Australian and New Zealand Journal of Audiology Year: 2001	Better quality study already included for the relevant topic
{36959}	Title: Impaired auditory attention skills following middle- ear infections Authors: Asbjornsen AE; Journal: Child Neuropsychology Year: 2005 Apr	Correlational study with no details about type of population and measurement of exposure
{36961}	Title: Long-term effects of otitis media with effusion on language, reading and spelling Authors: Schilder AGM; Journal: Clinical Otolaryngology and Allied Sciences Year: 1993	Same study as Ref ID 36983 (already included)
{36962}	Title: Chronic middle ear effusiona possible cause of protracted vomiting and failure to thrive in infancy Authors: Granot E; Journal: Clinical Pediatrics Year: 1990 Dec	Case series not relevant for the guideline question
{36963}	Title: The contribution of risk factors to the effect of early otitis media with effusion on later language, reading, and spelling Authors: Peters SAF; Journal: Developmental Medicine and Child Neurology Year: 1997	Same study as Ref ID 36983 (already included)
{36965}	Title: Risk factors in otitis media with effusion: A 1 year case control study in 5-7 year old children Authors: Williamson IG; Journal: Family Practice Year: 1994	Study on risk factors for OME
{36966}	Title: The effects of chronic middle ear effusion on speech and language development a descriptive study Authors: Lehmann MD; Journal: International Journal of Pediatric Otorhinolaryngology Year: 1979 Sep	Retrospective study of case series

Reference ID	Bibliographic Information	Reason For Rejecting
{36967}	Title: A 5-year prospective case-control study of the influence of early otitis media with effusion on reading achievement Authors: Lous J; Journal: International Journal of Pediatric Otorhinolaryngology Year: 1984 Oct	Better quality studies already included for the relevant topic
{36968}	Title: Otitis media with effusion: academic attainment and socioeconomic background Authors: Brooks DN; Journal: International Journal of Pediatric Otorhinolaryngology Year: 1987 Aug	Case series
{36969}	Title: The influence of chronic persistent otitis media with effusion on language development of 2- to 4-year-olds Authors: Rach GH; Journal: International Journal of Pediatric Otorhinolaryngology Year: 1988 Sep	Not relevant for the guideline question - sequelae of chronic persistent OME
{36971}	Title: Balance in children with otitis media with effusion Authors: Cohen H; Journal: International Journal of Pediatric Otorhinolaryngology Year: 1997 Dec 10	Poor quality case-control study
{36972}	Title: Sensorineural hearing loss associated with otitis media with effusion in children Authors: Mutlu C; Journal: International Journal of Pediatric Otorhinolaryngology Year: 1998 Dec 15	Case series not relevant for the guideline question
{36974}	Title: Risk factors for otitis media with effusion in Chinese schoolchildren: a nested case-control study and review of the literature Authors: Tong MC; Journal: International Journal of Pediatric Otorhinolaryngology Year: 2006 Feb	Not relevant for the guideline question - risk factors for OME
{36975}	Title: Hemifacial spasm associated with otitis media with effusion: A first reported case Authors: Lavon H; Journal: International Journal of Pediatric Otorhinolaryngology Year: 2006	Case report
{36976}	Title: The psychological, educational and auditory sequelae of early, persistent secretory otitis media Authors: Webster A; Journal: Journal of Child Psychology and Psychiatry and Allied Disciplines Year: 1989 Jul	Population not relevant for the guideline question

Reference ID	Bibliographic Information	Reason For Rejecting
{36977}	Title: Otitis media, hearing loss, and language learning controversies and current research Authors: Roberts J; Journal: Journal of Developmental and Behavioral Pediatrics Year: 2004	A review article (not a systematic review)
{36978}	Title: The relationship of otitis media in early childhood to attention dimensions during the early elementary school years Authors: Hooper SR; Journal: Journal of Developmental and Behavioral Pediatrics Year: 2006 Aug	Correlational study - same as Ref ID 37004 but outcomes different and assessed at different time period
{36979}	Title: Otitis media in infancy and intellectual ability, school achievement, speech, and language at age 7 years. Greater Boston Otitis Media Study Group Authors: Teele DW; Journal: Journal of Infectious Diseases Year: 1990 Sep	Correlational study - same as Ref ID 37000 but outcomes assessed at different time period
{36980}	Title: Dysequilibrium and otitis media with effusion: What is the association? Authors: Grace ARH; Journal: Journal of Laryngology and Otology Year: 1990	Better quality evidence already included
{36984}	Title: Sensorineural hearing loss associated with otitis media with effusion Authors: Harada T; Journal: Journal of Oto-Rhino-Laryngology and its Related Specialties Year: 1992	Case series not relevant for the guideline question
{36986}	Title: Otitis media, hearing sensitivity, and maternal responsiveness in relation to language during infancy Authors: Roberts JE; Journal: Journal of Pediatrics Year: 1995	Same study as another one (Ref ID 37004) but outcomes assessed at 1 year of age.
{36987}	Title: Otitis media in early childhood and cognitive, academic, and behavior outcomes at 12 years of age Authors: Roberts JE; Journal: Journal of Pediatric Psychology Year: 1995 Oct	Correlational study - same as Ref ID 37001 but outcomes assessed at different time period
{36988}	Title: Otitis media and language development at 1 year of age Authors: Wallace IF; Journal: Journal of Speech and Hearing Disorders Year: 1988 Aug	Population not relevant for the guideline question - high risk VLBW babies

Reference ID	Bibliographic Information	Reason For Rejecting
{36989}	Title: Language learning in a prospective study of otitis media with effusion in the first two years of life Authors: Friel-Patti S; Journal: Journal of Speech and Hearing Research Year: 1990 Mar	Correlation study with duration of OME calculated in a crude way
{36990}	Title: Otitis media in early childhood and later language Authors: Roberts JE; Journal: Journal of Speech and Hearing Research Year: 1991	Correlational study - same as Ref ID 37001 but explores further the effect of confounders/interactions
{36991}	Title: The effects of early bilateral otitis media with effusion on language ability: a prospective cohort study Authors: Grievink EH; Journal: Journal of Speech and Hearing Research Year: 1993 Oct	Same study as Ref ID 36983 (already included)
{36993}	Title: Parent-reported language skills in relation to otitis media during the first 3 years of life Authors: Feldman HM; Journal: Journal of Speech, Language, and Hearing Research Year: 2003	Correlational study with population not relevant for the guideline question - children with AOM and VT insertion
{36994}	Title: Otitis media, auditory sensitivity, and language outcomes at one year Authors: Wallace IF; Journal: Laryngoscope Year: 1988 Jan	Population not relevant for the guideline question - high risk VLBW babies
{36995}	Title: Childhood imbalance and chronic otitis media with effusion: effect of tympanostomy tube insertion on standardized tests of balance and locomotion Authors: Hart MC; Journal: Laryngoscope Year: 1998 May	Not relevant for the guideline question - effect of VT insertion on balance
{36997}	Title: Behaviour problems and otitis media with effusion: a report from the Dunedin Multidisciplinary Child Development Study Authors: McGee R; Journal: New Zealand Medical Journal Year: 1982 Sep 22	Better quality studies already included for the relevant topic
{36998}	Title: Effects of otitis media with effusion on the vestibular system in children Authors: Koyuncu M; Journal: Otolaryngology - Head and Neck Surgery Year: 1999 Jan	Case-control study Better quality evidence included for the relevant topic

Reference ID	Bibliographic Information	Reason For Rejecting
{36999}	Title: Late consequences of otitis media with effusion: Changes on linguistic and psycho-intellective development in children affected by this disease Authors: Mezzedimi C; Journal: Otorinolaringologia Pediatrica Year: 1998	Non-English article
{37000}	Title: Otitis media with effusion during the first three years of life and development of speech and language Authors: Teele DW; Journal: Pediatrics Year: 1984 Aug	Correlational study between duration of OME and speech/language
{37001}	Title: Otitis media in early childhood and its relationship to later verbal and academic performance Authors: Roberts JE; Journal: Pediatrics Year: 1986 Sep	Correlational study
{37002}	Title: Otitis media in early childhood and cognitive, academic, and classroom performance of the school-aged child Authors: Roberts JE; Journal: Pediatrics Year: 1989 Apr	Correlational study - same as Ref ID 37001 but outcomes assessed at different time period
{37003}	Title: Effect of otitis media with effusion on gross motor ability in preschool-aged children: preliminary findings Authors: Orlin MN; Journal: Pediatrics Year: 1997 Mar	Small sample size, confounding variables not controlled, no blinding of outcome assessors
{37004}	Title: Otitis media, the caregiving environment, and language and cognitive outcomes at 2 years Authors: Roberts JE; Journal: Pediatrics Year: 1998 Aug	Correlational study already included in the meta-analysis paper by the same author
{37005}	Title: Parent-reported language and communication skills at one and two years of age in relation to otitis media in the first two years of life Authors: Feldman HM; Journal: Pediatrics Year: 1999 Oct	Population includes some children with AOM and with VT inserted.
{37006}	Title: Otitis media in childhood in relation to preschool language and school readiness skills among black children Authors: Roberts JE; Journal: Pediatrics Year: 2000 Oct	Correlational study - same as Ref ID 37004 but outcomes assessed at different time period
{37007}	Title: Early childhood otitis media in relation to children's attention-related behavior in the first six years of life Authors: Minter KR; Journal: Pediatrics Year: 2001 May	Correlational study - same as Ref ID 37004 but outcomes assessed at different time period

Reference ID	Bibliographic Information	Reason For Rejecting
{37008}	Title: Otitis media in early childhood in relation to children's school-age language and academic skills Authors: Roberts JE; Journal: Pediatrics Year: 2002 Oct	Correlational study - same as Ref ID 37004 but outcomes assessed at different time period

#### Diagnosis

Reference ID	Bibliographic Information	Reason For Rejecting
{37242}	Title: Middle ear status at myringotomy and its relationship to middle ear immitance measurements Authors: Orchik DJ;Morff R;Dunn JW; Journal: Ear and Hearing Year: 1980 Nov	Study not relevant for the guideline question
{37243}	Title: Impedance audiometry in serous otitis media Authors: Orchik DJ;Morff R;Dunn JW; Journal: Archives of Otolaryngology Year: 1978 Jul	Population not specified
{37244}	Title: Tympanometry as a predictor of middle ear effusion Authors: Orchik DJ;Dunn JW;McNutt L; Journal: Archives of Otolaryngology Year: 1978 Jan	Population not specified
{37245}	Title: Tympanometric patterns found in middle ear effusions Authors: Cantekin El;Beery QC;Bluestone CD; Journal: Annals of Otology, Rhinology, and Laryngology - Supplement Year: 1977 Jul	Small sample size, blinding not specified. Better quality evidence included for the relevant test.
{37247}	Title: Acoustic reflectivity for diagnosis of middle ear effusions: Comparision with results of myringotomy. Authors: Fried M;Kelly J;Zubick H;Vernick D;Strome M; Journal: New Dimensions Otorhinolaryngol-Head Neck Surgery Year: 1985	Study on acoustic reflectometry - not relevant for the guideline question
{37248}	Title: Predictive value of parent-reported symptoms in the assessment of otitis media with effusion during infancy Authors: Engel J; Journal: Scandinavian Journal of Primary Health Care Year: 2000 Mar	Same study as Ref ID 37318 which is already included in evidence text
{37249}	Title: Detection of middle-ear fluid in children with spectral gradient acoustic reflectometry: a screening tool for nurses? Authors: Teppo H; Journal: Scandinavian Journal of Primary Health Care Year: 2006 Jun	Study on spectral gradient acoustic reflectometry - not relevant for the guideline question
{37250}	Title: Tympanometry in three-year-old children. III. Correlation between tympanometry and findings at paracentesis in a prospectively followed population of otherwise healthy children aged 34 years Authors: Fiellau-Nikolajsen M; Journal: Scandinavian Audiology Year: 1980	Time interval between the test and reference test > 48 hours

Reference ID	Bibliographic Information	Reason For Rejecting
{37251}	Title: The role of multifrequency tympanometry in otitis media Authors: bou-Elhamd K; Journal: Saudi Medical Journal Year: 2006	Study not relevant for the guideline question - on multifrequency tympanometry
{37252}	Title: Importance of Otomicroscopy and Acoustic Imittance measurements for the early detection of effusion in the middle ear of asymptomatic children in a pediatric outpatient clinic Authors: Isaac ML; Journal: Revista Brasileira de Otorrinolaringologia Year: 1999	Non-English article
{37253}	Title: Acoustic reflectometry in the detection of middle ear effusion Authors: Lampe RM; Journal: Pediatrics Year: 1985 Jul	Study on acoustic reflectometry - not relevant for the guideline question
{37254}	Title: Validity of acoustic reflectometry in detecting middle ear effusion Authors: Schwartz DM; Journal: Pediatrics Year: 1987 May	Reference test not a standard one
{37256}	Title: How helpful is pneumatic otoscopy in improving diagnostic accuracy? Authors: Jones WS; Journal: Pediatrics Year: 2003 Sep	Study using videotapes to evaluate diagnostic accuracy of pneumatic otoscopy - not relevant for the guideline question
{37257}	Title: Evidence assessment of the accuracy of methods of diagnosing middle ear effusion in children with otitis media with effusion. Authors: Takata GS; Journal: Pediatrics Year: 2003 Dec	Study outlining the results of review done by AHQR
{37258}	Title: Acoustic reflectometry detection of middle ear effusion Authors: Macknin ML; Journal: Pediatric Infectious Disease Journal Year: 1987 Sep	Study on acoustic reflectometry - not relevant for the guideline question
{37259}	Title: Acoustic reflectometry for assessment of hearing loss in children with middle ear effusion Authors: Teele DW; Journal: Pediatric Infectious Disease Journal Year: 1990 Dec	Study on acoustic reflectometry - not relevant for the guideline question
{37260}	Title: Predictive value of the angle of acoustic reflectometry Authors: Combs JT; Journal: Pediatric Infectious Disease Journal Year: 1991	Study on acoustic reflectometry - not relevant for the guideline question

Reference ID	Bibliographic Information	Reason For Rejecting
{37262}	Title: Use of tympanometry in office practice for diagnosis of otitis media Authors: Brookhouser PE; Journal: Pediatric Infectious Disease Journal Year: 1998 Jun	A literature review
{37264}	Title: Is parental perception an accurate predictor of childhood hearing loss? A prospective study Authors: Stewart MG; Journal: Archives of Otolaryngology Head and Neck Surgery Year: 1999 Mar	Correlation study of parents perception of hearing loss vs. actual hearing loss using a non-validated questionnaire
{37265}	Title: Diagnostic criteria for otitis media in children Authors: Alho O; Journal: Oto-Rhino-Laryngologia Nova Year: 1998	Retrospective analysis of data, time interval between the test and reference test not mentioned
{37266}	Title: A preliminary evaluation of the use of an automatic impedance tympanometer in the diagnosis of otitis media with effusion in children: a report from the Dunedin Multidisciplinary Health and Development Research Unit Authors: Stewart IA; Journal: New Zealand Medical Journal Year: 1983 Apr 13	Reference test used not a standard one
{37267}	Title: Microtympanometry, microscopy and tympanometry in evaluating middle ear effusion prior to myringotomy Authors: Fields MJ; Journal: New Zealand Medical Journal Year: 1993 Sep 8	Time interval between the test and reference test > 48 hours
{37268}	Title: Efficacy of acoustic otoscope in detecting middle ear effusion in children Authors: Oyiborhoro JM; Journal: Laryngoscope Year: 1987 Apr	Study on acoustic otoscope - not relevant for the guideline question
{37269}	Title: Persistent effusion following acute otitis media: tympanometry and pneumatic otoscopy in diagnosis Authors: Wilmot JF; Journal: Journal of the Royal College of General Practitioners Year: 1988 Apr	Reference test not a standard one and time interval between the test and reference test > 48 hours
{37270}	Title: Pure-tone assessment and screening of children with middle-ear effusion Authors: Silman S; Journal: Journal of the American Academy of Audiology Year: 1994 May	Reference test not a standard one

Reference ID	Bibliographic Information	Reason For Rejecting
{37271}	Title: Use of acoustic reflectometry in the detection of middle ear effusion Authors: Pellett FS; Journal: Journal of the American Academy of Audiology Year: 1997 Jun	Study on acoustic reflectometry - not relevant for the guideline question
{37272}	Title: Assessing diagnostic accuracy and tympanocentesis skills by nurse practitioners in management of otitis media Authors: Sorrento A; Journal: Journal of the American Academy of Nurse Practitioners Year: 2001 Nov	Study evaluating diagnostic ability of nurse practitioners using videotapes - not relevant for the guideline question
{37273}	Title: A comparison of audiometry and audiometry with tympanometry to determine middle ear status in school- age children Authors: Yockel NJ; Journal: Journal of School Nursing Year: 2002 Oct	Diagnostic results given for a combination of PTA and tympanometry
{37274}	Title: Detection of middle ear effusion by acoustic reflectometry Authors: Teele DW; Journal: Journal of Pediatrics Year: 1984 Jun	Study on acoustic reflectometry - not relevant for the guideline question
{37275}	Title: Objective diagnosis of otitis media in early infancy by tympanometry and ipsilateral acoustic reflex thresholds Authors: Marchant CD; Journal: Journal of Pediatrics Year: 1986 Oct	Reference test not performed in all subjects, blinding not specified
{37276}	Title: Minitympanometry in detecting middle ear fluid Authors: Koivunen P; Journal: Journal of Pediatrics Year: 1997	Better quality evidence already included for portable tympanometry
{37278}	Title: Tympanometric diagnosis of middle ear effusions Authors: Williams RG; Journal: Journal of Laryngology and Otology Year: 1977 Nov	Retrospective review of case records, selected population, no blinding, test and reference test not explained in details.
{37282}	Title: Middle ear effusion among children after acute otitis media. A diagnostic problem Authors: Lindeman P; Journal: International Journal of Pediatric Otorhinolaryngology Year: 1981 Apr	Study not relevant for the guideline question - related to AOM
{37283}	Title: A longitudinal study of the detection of otitis media in the first two years of life Authors: Wright PF; Journal: International Journal of Pediatric Otorhinolaryngology Year: 1985 Dec	Reference test not a standard one and results available for 63% of study population

Reference ID	Bibliographic Information	Reason For Rejecting
{37285}	Title: Tympanometry and otoscopy prior to myringotomy: issues in diagnosis of otitis media Authors: Finitzo T; Journal: International Journal of Pediatric Otorhinolaryngology Year: 1992 Sep	Time interval between the test and reference test not mentioned, blinding not specified. Studies with better quality evidence included for the relevant question.
{37287}	Title: Predictive value of acoustic reflectometry (angle and reflectivity) and tympanometry Authors: Kemaloglu YK; Journal: International Journal of Pediatric Otorhinolaryngology Year: 1999	Study on acoustic reflectometry - not relevant for the guideline question
{37288}	Title: Diagnostic value of tympanometry in infants in clinical practice Authors: Palmu A; Journal: International Journal of Pediatric Otorhinolaryngology Year: 1999 Aug 20	Reference test (myringotomy) performed in only 42/242 cases
{37289}	Title: Evaluation of the use of a questionnaire to detect hearing loss in babies in China Authors: Newton VE; Journal: International Journal of Pediatric Otorhinolaryngology Year: 1999 May 5	Study not relevant for the guideline question - questionnaire to detect hearing loss due to perinatal problems
{37292}	Title: Comparison of performance by otolaryngologists, pediatricians, and general practioners on an otoendoscopic diagnostic video examination Authors: Pichichero ME; Journal: International Journal of Pediatric Otorhinolaryngology Year: 2005 Mar	Study comparing diagnostic skills of different health care professionals - not relevant for the guideline question
{37293}	Title: Tympanometry by nursescan allocation of tasks be optimised? Authors: Blomgren K; Journal: International Journal of Pediatric Otorhinolaryngology Year: 2007 Jan	Study comparing tympanometry results performed by nurses after a training workshop vs. myringotomy - not relevant for the guideline question
{37295}	Title: Diagnostic accuracy of otitis media and tympanocentesis skills assessment among pediatricians Authors: Pichichero ME; Journal: European Journal of Clinical Microbiology and Infectious Diseases Year: 2003 Sep	Study comparing diagnostic abilities of different health care professionals - not relevant for the guideline question
{37298}	Title: Otoscopic findings in relation to tympanometry during infancy Authors: Engel J; Journal: European Archives of Oto-Rhino-Laryngology Year: 2000	Correlation study between the findings of otoscopy vs. tympanometry

Reference ID	Bibliographic Information	Reason For Rejecting
{37299}	Title: Spectral gradient acoustic reflectometry in the diagnosis of middle-ear fluid in children Authors: Linden H; Journal: European Archives of Oto-Rhino-Laryngology Year: 2007	Study on acoustic reflectometry - not relevant for the guideline question
{37300}	Title: Tympanometry and audiometry in diagnosis of middle-ear effusions Authors: Ben-David J; Journal: Ear, Nose, and Throat Journal Year: 1981 Mar	Data not extractable
{37301}	Title: Modern acoustic reflectometry: accuracy in diagnosing otitis media with effusion Authors: Babb MJ; Journal: Ear, Nose, and Throat Journal Year: 2004 Sep	Study on acoustic reflectometry - not relevant for the guideline question
{37302}	Title: The acoustic reflectometer as a screening device: a comparison Authors: Buhrer K; Journal: Ear and Hearing Year: 1985 Nov	Study on acoustic reflectometry - not relevant for the guideline question
{37305}	Title: Otoacoustic emissions and tympanometry in children with otitis media Authors: Koivunen P; Journal: Ear and Hearing Year: 2000 Jun	Data not extractable for tympanometry
{37306}	Title: Evidence assessment of the accuracy of methods of diagnosing middle ear effusion in children with otitis media with effusion (Provisional record) Authors: Centre for Reviews and Dissemination.; Journal: Database of Abstracts of Reviews of Effects Year: 2007	Evaluation of a systematic review by DARE
{37307}	Title: A comparison of otoscopy and tympanometry in the diagnosis of middle ear effusion Authors: Haughton PM; Journal: Clinical Physics and Physiological Measurement Year: 1982 Aug	Data not extractable and probability model used for the results
{37311}	Title: Could the presence of a Carhart notch predict the presence of glue at myringotomy? Authors: Kumar M; Journal: Clinical Otolaryngology and Allied Sciences Year: 2003 Jun	Time interval between the test and reference test > 48 hours

Reference ID	Bibliographic Information	Reason For Rejecting
{37312}	Title: Diagnostic methods for otitis media with effusion in children Authors: Guo YC; Journal: Chung Hua i Hsueh Tsa Chih - Chinese Medical Journal Year: 2002 Aug	Same study as Ref ID 37291 - already included in the evidence text.
{37313}	Title: Selecting persistent glue ear for referral in general practice: A risk factor approach Authors: Haggard MP; Journal: British Journal of General Practice Year: 2002	Study on risk factors for referral - not relevant for the guideline question
{37315}	Title: Evaluation of acoustic reflectometry in detecting otitis media in children Authors: Douniadakis DE; Journal: British Journal of Audiology Year: 1993 Dec	Study on acoustic reflectometry - not relevant for the guideline question
{37316}	Title: Community-based validation of the McCormick Toy Test Authors: Harries J; Journal: British Journal of Audiology Year: 2000 Oct	Study not relevant for the guideline question
{37320}	Title: How appropriate is the OM6 as a discriminative instrument in children with otitis media? Authors: Kubba H; Journal: Archives of Otolaryngology Head and Neck Surgery Year: 2004 Jun	Study on validity of a questionnaire (OM6) - not relevant for the guideline question
{37321}	Title: Cleft palate and glue ear Authors: Grant HR; Journal: Archives of Disease in Childhood Year: 1988 Feb	Not relevant for the guideline question
{37322}	Title: Tympanometry revealing middle ear pathology Authors: Renvall U; Journal: Annals of Otology, Rhinology and Laryngology Year: 1976 Mar	Type of reference test and time interval between the test and reference test not mentioned
{37323}	Title: Improved diagnosis of middle ear effusions employing the objective otoscope Authors: Lovette S; Journal: Annals of Otology, Rhinology and Laryngology Year: 1976 Mar	Study not relevant for the guideline question - diagnostic accuracy of a new objective otoscope measured
{37324}	Title: Design factors in the characterization and identification of otitis media and certain related conditions Authors: Bluestone CD; Journal: Annals of Otology, Rhinology, and Laryngology - Supplement Year: 1979 Sep	Findings of this study already given in another included study 37325 (with larger sample size)

Reference ID	Bibliographic Information	Reason For Rejecting
{37326}	Title: Validation of an automatic otoadmittance middle ear analyzer Authors: Fria TJ; Journal: Annals of Otology, Rhinology and Laryngology Year: 1980 May	Study on validation of a new instrument - not relevant for the guideline question
{37327}	Title: Tympanometry in three-year-old children. Prevalence and spontaneous course of MEE Authors: Fiellau-Nikolajsen M; Journal: Annals of Otology, Rhinology, and Laryngology - Supplement Year: 1980 May	Study on prevalence and ability of tympanometry to detect seasonal changes in course of MEE - not relevant for the guideline question
{37328}	Title: Efficacy of acoustic reflectometry in detecting middle ear effusion Authors: Avery CA; Journal: Annals of Otology, Rhinology and Laryngology Year: 1986 Sep	Study on acoustic reflectometry - not relevant for the guideline question
{37331}	Title: Latent class analysis: An illustrative application for education in the assessment of resident otoscopic skills Authors: jamin Jr DK; Journal: Ambulatory Pediatrics Year: 2004	Study not relevant for the guideline question
{37332}	Title: The accuracy of tympanometry assessed by its sensitivity and specificity Authors: Szucs E; Journal: Acta Oto-Rhino-Laryngologica Belgica Year: 1995	Time interval between the test and reference test > 48 hours

#### Natural history or resolution

Reference ID	Bibliographic Information	Reason For Rejecting
{37522}	Title: Seasonal variation in the prevalence of persistent otitis media with effusion in one-year-old infants Authors: Rovers MM; Journal: Paediatric and Perinatal Epidemiology Year: 2000 Jul	Study not relevant for the guideline question - effect of season on OME resolution
{37523}	Title: Pars tensa and pars flaccida retractions in persistent otitis media with effusion Authors: Haggard MP; Journal: Otology and Neurotology Year: 2001	Study not relevant for the guideline question - effect of pars tensa and pars flaccida retractions on hearing
{37525}	Title: Otitis media in children: seasonal changes and socioeconomic level Authors: Castagno LA; Journal: International Journal of Pediatric Otorhinolaryngology Year: 2002 Feb 1	Study not relevant for the guideline question - OME prevalence determined in relation to SE status and seasonality.
{37526}	Title: Predicting the development and outcome of otitis media by tympanometry Authors: Palmu A; Journal: International Journal of Pediatric Otorhinolaryngology Year: 2002	Study not relevant for the guideline question - related to resolution of AOM
{37527}	Title: Incidence and outcome of middle ear disease in cleft lip and/or cleft palate Authors: Sheahan P; Journal: International Journal of Pediatric Otorhinolaryngology Year: 2003 Jul	Study not relevant for the particular guideline question, but included under evidence on children with cleft palate.
{37528}	Title: The effect of the season on otitis media with effusion resolution rates in the New York Metropolitan area Authors: Gordon MA; Journal: International Journal of Pediatric Otorhinolaryngology Year: 2004 Feb	Study not relevant for the guideline question - relationship between seasonality and resolution rates
{37529}	Title: Screening for otitis media with effusion to measure its prevalence in Chinese children in Hong Kong Authors: Tong MC; Journal: Ear, Nose, and Throat Journal Year: 2000 Aug	Study not relevant for the guideline question - on prevalence of OME
{37530}	Title: The effect of short-term ventilation tubes versus watchful waiting on hearing in young children with persistent otitis media with effusion: a randomized trial Authors: Rovers MM; Journal: Ear and Hearing Year: 2001 Jun	Study not relevant for the guideline question but is included in the review comparing the effectiveness of VT vs. watchful waiting.

Reference ID	Bibliographic Information	Reason For Rejecting
{37531}	Title: Risk factors for persistence of bilateral otitis media with effusion Authors: Haggard MP; Journal: Clinical Otolaryngology and Allied Sciences Year: 2001 Apr	Study not relevant for the guideline question - on risk factors

#### Surgical and non-surgical management

Reference ID	Bibliographic Information	Reason For Rejecting
{17777}	Glue ear statistical analysis. An investigation into the treatment given by Dr. Anthony Mathews over the last ten years. Thesis. Year: 2004	Selected population for a survey, poor response rate, population comprising heterogeneous group of children (56 without surgical Rx, 13 with VT, 10 with VT+adenoid.), non-validated questionnaire, lack of consistent treatment
{37321}	Title: Cleft palate and glue ear Authors: Grant HR; Journal: Archives of Disease in Childhood Year: 1988 Feb	Combined results given for surgical repair of cleft palate + VT insertion - data not extractable separately for the interventions.
{37531}	Title: Risk factors for persistence of bilateral otitis media with effusion Authors: Haggard MP; Journal: Clinical Otolaryngology and Allied Sciences Year: 2001 Apr	Study on risk factors for persistent B/L OME - not relevant for the guideline question
{37679}	Title: Economic evaluation of ventilation tubes in otitis media with effusion Authors: Hartman M; Journal: Archives of Otolaryngology - Head and Neck Surgery Year: 2001	Clinical data from this study included in the Cochrane review (Ref ID 37759) evaluating the effectiveness of VT insertion for OME
{37681}	Title: Does adenoidectomy have an adjuvant effect on ventilation tube insertion and thus reduce the need for re- treatment? Authors: Maw AR; Journal: Clinical Otolaryngology and Allied Sciences Year: 1994 Aug	Data from this study given in another study by the same author - included in evidence
{37689}	Title: Effect of ventilation tube insertion on otitis media with effusion in cleft palate children Authors: Liu L; Journal: Zhonghua Er Bi Yan Hou Ke Za Zhi Year: 2004	Non-English article
{37690}	Title: Tympanostomy tube sequelae in children with otitis media with effusion: a three-year follow-up study Authors: Pereira MB;Pereira DR;Costa SS; Journal: Revista Brasileira de Otorrinolaringologia Year: 2005 Jul	Better quality evidence/systematic review included for the relevant topic
{37694}	Title: Amoxicillin or myringotomy or both for acute otitis media: results of a randomized clinical trial Authors: Kaleida PH;Casselbrant ML;Rockette HE;Paradise JL;Bluestone CD;Blatter MM;Reisinger KS;Wald ER;Supance JS; Journal: Pediatrics Year: 1991 Apr	Study population of children with AOM - not relevant for the guideline question

Reference ID	Bibliographic Information	Reason For Rejecting
{37698}	Title: Otorrhea in young children after tympanostomy-tube placement for persistent middle-ear effusion: prevalence, incidence, and duration Authors: Ah-Tye C; Journal: Pediatrics Year: 2001 Jun	Study on otorrhoea following VT insertion
{37700}	Title: Adenoidectomy does not significantly reduce the incidence of otitis media in conjunction with the insertion of tympanostomy tubes in children who are younger than 4 years: A randomized trial Authors: Hammaren-Malmi SS; Journal: Pediatrics Year: 2005	Population not relevant for the guideline question - children with recurrent AOM
{37702}	Title: Evaluation of ventilating tubes and myringotomy in the treatment of recurrent or persistent otitis media Authors: Le CT;Freeman DW;Fireman BH; Journal: Pediatric Infectious Disease Journal Year: 1991 Jan	Population not relevant for the guideline question - includes children with recurrent AOM
{37704}	Title: Efficacy of antimicrobial prophylaxis for recurrent middle ear effusion Authors: Mandel EM; Journal: Pediatric Infectious Disease Journal Year: 1996	Study on antimicrobial prophylaxis - not relevant for the guideline question
{37706}	Title: Lack of efficacy of middle-ear inflation: treatment of otitis media with effusion in children Authors: Chan KH; Journal: Otolaryngology - Head and Neck Surgery Year: 1989 Apr	Higher quality evidence (Cochrane review with Ref ID 37684) included for the relevant topic
{37714}	Title: Developmental outcomes after early or delayed insertion of tympanostomy tubes Authors: Paradise JL;Campbell TF; Journal: New England Journal of Medicine Year: 2005 Aug 11	Same study as Ref ID 37713 which is already included in the evidence/systematic review (Ref ID 37759) evaluating the effectiveness of surgical interventions for OME.
{37716}	Title: Effect of adenoidectomy upon children with chronic otitis media with effusion Authors: Gates GA;Avery CA;Prihoda TJ; Journal: Laryngoscope Year: 1988 Jan	Data from this study given in another study by the same author (Ref ID 37712) which is included in the evidence text.
{37717}	Title: Otological and audiological outcomes five years after tympanostomy in early childhood Authors: Valtonen HJ;Qvarnberg YH; Journal: Laryngoscope Year: 2002 Apr	Sample population of children with recurrent AOM - not relevant for the guideline question

Reference ID	Bibliographic Information	Reason For Rejecting
{37722}	Title: Factors affecting the extrusion rates of ventilation tubes Authors: Mackenzie IJ; Journal: Journal of the Royal Society of Medicine Year: 1984 Sep	Study not relevant for the guideline question
{37724}	Title: Outcome analysis of children receiving tympanostomy tubes Authors: Franklin JH; Journal: Journal of Otolaryngology Year: 1998 Oct	No comparison group
{37726}	Title: Long term results of treatment of middle ear effusion Authors: Brooks DN; Journal: Journal of Laryngology and Otology Year: 1980 Oct	High drop out rate (40%), retrospective review of case records
{37727}	Title: Tympanosclerosis of the drum in secretory otitis after insertion of grommets. A prospective, comparative study Authors: Tos M; Journal: Journal of Laryngology and Otology Year: 1983 Jun	Higher quality evidence already included (Ref ID 37831) for the relevant topic
{37728}	Title: Development of tympanosclerosis in children with otitis media with effusion and ventilation tubes Authors: Maw AR; Journal: Journal of Laryngology and Otology Year: 1991 Aug	Data from the study already included in the evidence/systematic review evaluating the effectiveness of surgical interventions.
{37731}	Title: Nonsurgical management of surgical otitis media with effusion Authors: Rosenfeld RM; Journal: Journal of Laryngology and Otology Year: 1995 Sep	Non-randomized trial. Better quality evidence already included.
{37732}	Title: Myringotomy and ventilation tube insertion: a ten- year follow-up Authors: Riley DN;Herberger S; Journal: Journal of Laryngology and Otology Year: 1997 Mar	No comparison group
{37735}	Title: Generalizability of trial results based on randomized versus nonrandomized allocation of OME infants to ventilation tubes or watchful waiting Authors: Rovers MM; Journal: Journal of Clinical Epidemiology Year: 2001 Aug	Study not relevant for the guideline question

Reference ID	Bibliographic Information	Reason For Rejecting
{37736}	Title: Efficacy of adenoidectomy for recurrent otitis media in children previously treated with tympanostomy-tube placement. Results of parallel randomized and nonrandomized trials Authors: Paradise JL;Bluestone CD;Rogers KD; Journal: JAMA: the journal of the American Medical Association Year: 1990 Apr 18	Population comprising of children who already had VT insertion - not relevant for the guideline question
{37738}	Title: Use of antibiotics in preventing recurrent acute otitis media and in treating otitis media with effusion. A meta- analytic attempt to resolve the brouhaha [erratum appears in JAMA 1994 Feb 9;271(6):430] Authors: Williams RL;Chalmers TC;Stange KC; Journal: JAMA: the journal of the American Medical Association Year: 1993 Sep 15	Review not relevant for the guideline question - prophylaxis of recurrent AOM
{37739}	Title: Adenoidectomy and adenotonsillectomy for recurrent acute otitis media: parallel randomized clinical trials in children not previously treated with tympanostomy tubes.[see comment] Authors: Paradise JL;Bluestone CD; Journal: JAMA: the journal of the American Medical Association Year: 1999 Sep 8	Population not relevant for the guideline question - children with recurrent AOM
{37740}	Title: Chronic otitis media with effusion and adeno- tonsillectomya prospective randomized controlled study Authors: Maw AR; Journal: International Journal of Pediatric Otorhinolaryngology Year: 1983 Dec	Data from this study given in another study by the same author (Ref ID 37719) - which is included in the evidence
{37741}	Title: Tympanic membrane atrophy, scarring, atelectasis and attic retraction in persistent, untreated otitis media with effusion and following ventilation tube insertion Authors: Maw AR; Journal: International Journal of Pediatric Otorhinolaryngology Year: 1994 Nov	Higher quality evidence already included (Ref ID 37831) for the relevant topic
{37742}	Title: Complications of tympanostomy tubes in an inner city clinic population Authors: Goldstein NA;Roland JT; Journal: International Journal of Pediatric Otorhinolaryngology Year: 1996 Jan	No comparison group, population not representative and slection bias, confounding not controlled

Reference ID	Bibliographic Information	Reason For Rejecting
{37746}	Title: The role of topical nasal steroids in the treatment of children with otitis media with effusion and/or adenoid hypertrophy Authors: Cengel S;Akyol MU; Journal: International Journal of Pediatric Otorhinolaryngology Year: 2006 Apr	Study population of children with adenoidal hypertrophy - not relevant for the guideline question
{37748}	Title: Systematic review of autoinflation for treatment of glue ear in children (Structured abstract) Authors: Centre for Reviews and Dissemination.; Journal: Database of Abstracts of Reviews of Effects Year: 2007	Appraisal of a systematic review done by DARE
{37749}	Title: Does topical antibiotic prophylaxis reduce post- tympanostomy tube otorrhea? (Structured abstract) Authors: Centre for Reviews and Dissemination.; Journal: Database of Abstracts of Reviews of Effects Year: 2007	Study not relevant for the guideline question - efficacy of topical antibiotics against purulent post-operative otorrhoea
{37751}	Title: Grommets in otitis media with effusion: an individual patient data meta-analysis (Structured abstract) Authors: Centre for Reviews and Dissemination.; Journal: Database of Abstracts of Reviews of Effects Year: 2007	Evaluation of the systematic review done by DARE
{37754}	Title: Immunostimulating agents for the prevention of acute otitis media Authors: Williamson I; Journal: Cochrane Database of Systematic Reviews Year: 2007	Protocol for a Cochrane review
{37755}	Title: Interventions for ear discharge associated with grommets (ventilation tubes) Authors: Vaile L; Journal: Cochrane Database of Systematic Reviews Year: 2007	Study on treatment of otorrhoea following VT insertion - not relevant for the guideline question
{37756}	Title: Probiotics for the prevention of acute otitis media in children Authors: Crosby Z; Journal: Cochrane Database of Systematic Reviews Year: 2007	Protocol for a Cochrane review
{37757}	Title: Antibiotic treatment for otitis media with effusion in children aged 6 months - 12 years Authors: Van Balen FAM;Cantekin EI; Journal: Cochrane Database of Systematic Reviews Year: 2007	Protocol for a Cochrane review

Reference ID	Bibliographic Information	Reason For Rejecting
{37761}	Title: Identification of children in the first four years of life for early treatment for otitis media with effusion Authors: Simpson SA;Thomas CL;van der Linden MK; Journal: Cochrane Database of Systematic Reviews Year: 2007	Study not relevant for the guideline question - effectiveness of screening for OME
{37762}	Title: A prospective randomized trial of adenoidectomy vs grommet insertion in the treatment of glue ear Authors: Bulman CH; Journal: Clinical Otolaryngology and Allied Sciences Year: 1984 Apr	Data not extractable for different groups
{37764}	Title: The effectiveness of adenoidectomy in the treatment of glue ear: a randomized controlled trial Authors: Black N; Journal: Clinical Otolaryngology and Allied Sciences Year: 1986 Jun	Data from this study included in another study by the same author (Ref ID 37775) given in the review on effectiveness of VT insertion
{37767}	Title: Long-term effects of ventilation tubes for persistent otitis media with effusion in children Authors: Schilder AG;Hak E; Journal: Clinical Otolaryngology and Allied Sciences Year: 1997 Oct	Higher quality evidence on the relevant topic included in the guideline
{37769}	Title: Two-year outcome of ventilation tubes in a randomized controlled trial of persistent childhood otitis media with effusion Authors: Browning GG; Journal: Clinical Otolaryngology and Allied Sciences Year: 2001	Abstract
{37770}	Title: Surgery for persistent otitis media with effusion: Generalizability of results from the UK trial (TARGET) Authors: Haggard MP; Journal: Clinical Otolaryngology and Allied Sciences Year: 2001	Study not relevant for the guideline question - comparison of characteristics of study population vs. those lost to follow-up to rule out selection bias in TARGET trial
{37771}	Title: Surgery for persistent otitis media with effusion: generalizability of results from the UK trial (TARGET). Trial of Alternative Regimens in Glue Ear Treatment Authors: Medical Research Council Multicentre Otitis Media Study Group.; Journal: Clinical Otolaryngology and Allied Sciences Year: 2001 Oct	Study not relevant for the guideline question - comparison of characteristics of study population vs. those lost to follow-up to rule out selection bias in TARGET trial.
{37772}	Title: Long-term ventilation tubes: Results of 726 insertions Authors: van HN; Journal: Clinical Otolaryngology and Allied Sciences Year: 2002	Retrospective study with no comparison group. Better quality studies already included for the relevant topic.

Reference ID	Bibliographic Information	Reason For Rejecting
{37773}	Title: The role of ventilation tube status in the hearing levels in children managed for bilateral persistent otitis media with effusion Authors: Haggard MP; Journal: Clinical Otolaryngology and Allied Sciences Year: 2003	Effect of functioning VT on alleviating degree of hearing impairment - not relevant for the guideline question
{37774}	Title: The role of ventilation tube status in the hearing levels in children managed for bilateral persistent otitis media with effusion Authors: MRC Multicentre Otitis Media Study Group.; Journal: Clinical Otolaryngology and Allied Sciences Year: 2003 Apr	Effect of functioning VT on alleviating degree of hearing impairment - not relevant for the guideline question
{37777}	Title: Systematic review of autoinflation for treatment of glue ear in children Authors: Reidpath DD;Glasziou PP;Del MC; Journal: British Medical Journal Year: 1999 May 1	Poor quality systematic review - methodology not described, studies not appraised of quality, pooling together of heterogeneous studies
{37778}	Title: S-carboxymethylcysteine in the treatment of glue ear: quantitative systematic review Authors: Moore RA; Journal: BMC Family Practice Year: 2001	Not relevant for the guideline question
{37779}	Title: Ventilation tubes in infants increase the risk of otorrhoea and antibiotic usage Authors: Ingels K; Journal: B-ENT Year: 2005	Study not relevant for the guideline question - effect of VT on AOM
{37780}	Title: Long term follow-up of secretory otitis media in children: the effects of adenotonsillectomy with insertion of a ventilation tube Authors: Suzuki M; Journal: Auris, Nasus, Larynx Year: 1985	Higher quality evidence already included for complications/sequelae
{37781}	Title: Steroids for otitis media with effusion: A systematic review Authors: Butler CC; Journal: Archives of Pediatrics and Adolescent Medicine Year: 2001	High quality evidence (cochrane review) already included for the relevant question. This review pooled results from a heterogeneous group of RCT's (difference in dosage, duration of steroids, and type of combined therapy).
{37783}	Title: Secretory otitis media. Long-term observations after treatment with grommets Authors: Barfoed C; Journal: Archives of Otolaryngology Year: 1980 Sep	Higher quality evidence already included (Ref ID 37831) for the relevant topic

Reference ID	Bibliographic Information	Reason For Rejecting
{37784}	Title: Hearing loss in tympanosclerosis caused by grommets Authors: Tos M; Journal: Archives of Otolaryngology Head and Neck Surgery Year: 1989 Aug	Higher quality evidence already included (Ref ID 37831) for the relevant topic
{37786}	Title: Myringotomy with and without tympanostomy tubes for chronic otitis media with effusion Authors: Mandel EM; Journal: Archives of Otolaryngology - Head and Neck Surgery Year: 1989	Data not extractable separately for intervention groups
{37787}	Title: Systemic steroids for otitis media with effusion in children Authors: Rosenfeld RM; Journal: Archives of Otolaryngology Head and Neck Surgery Year: 1991 Sep	Literature search not vigorous, methodology not explained in detail. Higher quality evidence (cochrane review) already included for the relevant topic
{37789}	Title: Quality-of-life outcomes after surgical intervention for otitis media Authors: Richards M; Journal: Archives of Otolaryngology - Head and Neck Surgery Year: 2002	Population not relevant for the guideline question - children with recurrent AOM
{37790}	Title: Chronic otitis media with effusion sequelae in children treated with tubes Authors: Daly KA; Journal: Archives of Otolaryngology - Head and Neck Surgery Year: 2003	A meta-analysis of complications of VT insertion already included in the evidence
{37791}	Title: A 14-year prospective follow-up study of children treated early in life with tympanostomy tubes: Part 2: Hearing outcomes Authors: Valtonen H; Journal: Archives of Otolaryngology - Head and Neck Surgery Year: 2005	Population not relevant for the guideline question - children with recurrent AOM
{37792}	Title: Sequelae of ventilation tubes following tonsillectomy Authors: Svane-Knudsen V; Journal: Archives of Oto- Rhino-Laryngology Year: 1985	Study not relevant for the guideline question - study comparing effect of tonsillectomy on TM abnormalities
{37795}	Title: Adenoidectomy versus tympanostomy in chronic secretory otitis media Authors: Marshak G; Journal: Annals of Otology, Rhinology, and Laryngology - Supplement Year: 1980 May	Poor quality retrospective study
{37796}	Title: Adenoidectomy for otitis media with mucoid effusion Authors: Roydhouse N; Journal: Annals of Otology, Rhinology and Laryngology Year: 1980	Combination of non-surgical interventions used in one group

Reference ID	Bibliographic Information	Reason For Rejecting
{37799}	Title: Tympanic membrane perforations and tympanostomy tubes Authors: Levine S; Journal: Annals of Otology, Rhinology, and Laryngology - Supplement Year: 1994 May	No comparator group. Higher quality evidence on the relevant topic already included
{37801}	Title: Hearing loss in young adults who had ventilation tube insertion in childhood Authors: De Beer BA; Journal: Annals of Otology, Rhinology and Laryngology Year: 2004	Population not relevant for the guideline question - children with recurrent AOM
{37802}	Title: Grommets versus paracentesis in secretory otitis media. A prospective, controlled study Authors: Bonding P; Journal: American Journal of Otology Year: 1985 Nov	Poor quality evidence - non-randomized trial
{37803}	Title: Medical management of chronic middle-ear effusion. Results of a clinical trial of prednisone combined with sulfamethoxazole and trimethoprim Authors: Berman S; Journal: American Journal of Diseases of Children Year: 1987 Jun	Data from this study already included in the evidence/systematic review (Ref ID 37760) evaluating the effectiveness of Antibiotics for OME
{37804}	Title: Seromucous otitis in children with cleft palate Authors: Sancho M; Journal: Acta Otorrinolaringologica Espanola Year: 1997	Non-English article
{37805}	Title: Ventilation tubes in secretory otitis media. A randomized, controlled study of the course, the complications, and the sequelae of ventilation tubes Authors: Lildholdt T; Journal: Acta Oto-Laryngologica Supplement Year: 1983	Higher quality evidence already included (Ref ID 37831) for the relevant topic
{37806}	Title: Consequences of ventilation tube treatment Authors: Lildholdt T; Journal: Acta Oto-Laryngologica Supplement Year: 1984	Conference abstract
{37807}	Title: Surgery of the tonsils and adenoids in relation to secretory otitis media in children Authors: Maw AR; Journal: Acta Oto-Laryngologica, Supplement Year: 1988	Data from this study given in another study by the same author (Ref ID 37719) which is included in the evidence

Reference ID	Bibliographic Information	Reason For Rejecting
{37808}	Title: Surgery of the tonsils and adenoids in relation to secretory otitis media in children Authors: Maw AR; Journal: Acta Oto-Laryngologica Supplement Year: 1988	Data from this study given in another study by the same author (Ref ID 37719) which is included in the evidence
{37809}	Title: Effect of N-acetylcysteine on the incidence of recurrence of otitis media with effusion and re-insertion of ventilation tubes Authors: Ovesen T; Journal: Acta Oto-Laryngologica Supplement Year: 2000	Effectiveness of two interventions evaluated together
{37810}	Title: A comparative study of azithromycin and pseudoephedrine hydrochloride for otitis media with effusion in children Authors: Asim SM; Journal: Acta Oto-Laryngologica Year: 2001	Comparison of effectiveness of antibiotics vs. antihistamines - not relevant for the guideline question

#### Management in children with Down's syndrome and children with cleft palate

Reference ID	Bibliographic Information	Reason For Rejecting
{36952}	Title: Down syndrome: Common otolaryngologic manifestations Authors: Shott SR; Journal: American Journal of Medical Genetics Year: 2006	A lierature review
{36970}	Title: Middle ear disease in cleft palate children at three years of age Authors: Rynnel-Dagoo B; Journal: International Journal of Pediatric Otorhinolaryngology Year: 1992 May	Not relevant for the guideline question
{37710}	Title: Consequences of unremitting middle-ear disease in early life. Otologic, audiologic, and developmental findings in children with cleft palate Authors: Hubbard TW;Paradise JL;McWilliams BJ;Elster BA;Taylor FH; Journal: New England Journal of Medicine Year: 1985 Jun 13	This study included in the systematic review by Ponduri S (Ref ID 39012) - given under management of children with cleft palate
{37723}	Title: The middle ear in cleft palate children pre and post palatal closure Authors: Dhillon RS; Journal: Journal of the Royal Society of Medicine Year: 1988 Dec	Not relevant for the guideline question
{37729}	Title: A conservative approach to the management of otitis media with effusion in cleft palate children Authors: Robson AK;Blanshard JD; Journal: Journal of Laryngology and Otology Year: 1992 Sep	This study included in the systematic review by Ponduri S (Ref ID 39012) - given under management of children with cleft palate
{37745}	Title: Efficacy of adenoidectomy in the treatment of nasal and middle ear symptoms in children with Down syndrome Authors: Price DL;Orvidas LJ;Weaver AL;Farmer SA; Journal: International Journal of Pediatric Otorhinolaryngology Year: 2004 Jan	Not relevant for the guideline question - adenoidectomy performed for nasal and middle ear symptoms and data not given separately for the conditions.
{37811}	Title: Cleft palate and otitis media with effusion: A review Authors: Sheahan P; Journal: Revue de Laryngologie Otologie Rhinologie Year: 2003	A literature review
{37812}	Title: Conductive hearing loss in infants and young children with cleft palate Authors: Fria TJ;Paradise JL;Sabo DL;Elster BA; Journal: Journal of Pediatrics Year: 1987 Jul	Not relevant for the guideline question

Reference ID	Bibliographic Information	Reason For Rejecting
{37813}	Title: Bifid uvula: prevalence and association in otitis media with effusion in children admitted for routine otolaryngological operations Authors: Rivron RP; Journal: Journal of Laryngology and Otology Year: 1989 Mar	Not relevant for the guideline question
{37815}	Title: Conservative management of otitis media in cleft palate Authors: Shaw RJ; Journal: Journal of Cranio- Maxillofacial Surgery Year: 2003	This study included in the systematic review by Ponduri S (Ref ID 39012) - given under management of children with cleft palate
{37816}	Title: Late ear sequelae in cleft palate patients Authors: Gordon AS; Journal: International Journal of Pediatric Otorhinolaryngology Year: 1988 May	This study included in the systematic review by Ponduri S (Ref ID 39012) - given under management of children with cleft palate
{37818}	Title: UK and Ireland experience of bone anchored hearing aids (BAHA <sup></sup> ) in individuals with Down syndrome Authors: Sheehan PZ; Journal: International Journal of Pediatric Otorhinolaryngology Year: 2006	Not relevant for the guideline question
{37819}	Title: Otitis media in the cleft palate patient Authors: Moore IJ;Moore GF;Yonkers AJ; Journal: Ear, Nose, and Throat Journal Year: 1986 Jul	Personal opinion/commentary
{37821}	Title: Sequelae of otitis media with effusion among children with cleft lip and/or cleft palate Authors: Sheahan P; Journal: Clinical Otolaryngology and Allied Sciences Year: 2002 Dec	This study included in the systematic review by Ponduri S (Ref ID 39012) - given under management of children with cleft palate
{37822}	Title: Comparison of the hearing histories of children with and without cleft palate Authors: Broen PA;Moller KT; Journal: Cleft palate-craniofacial journal Year: 1996 Mar	This study included in the systematic review by Ponduri S (Ref ID 39012) - given under management of children with cleft palate
{37824}	Title: Management of middle ear effusions in infants with cleft palate Authors: Paradise JL; Journal: Annals of Otology, Rhinology and Laryngology Year: 1976 Mar	This study included in the systematic review by Ponduri S (Ref ID 39012) - given under management of children with cleft palate
{37825}	Title: Hearing, middle ear pressure and otopathology in a cleft palate population Authors: Moller P; Journal: Acta Oto-Laryngologica Year: 1981 Nov	Not relevant for the guideline question.

Reference ID	Bibliographic Information	Reason For Rejecting
{37826}	Title: Selective use of ventilating tubes in the treatment of secretory otitis media and retractions of the ear drum Authors: Moller P; Journal: Acta Oto-Laryngologica Year: 1982	This study included in the systematic review by Ponduri S (Ref ID 39012) - given under management of children with cleft palate

Other NICE guidelines produced by the National Collaborating Centre for Women's and Children's Health include:

- Antenatal care: routine care for the healthy pregnant woman
- Fertility: assessment and treatment for people with fertility problems
- Caesarean section
- Type 1 diabetes: diagnosis and management of type 1 diabetes in children and young people
- Long-acting reversible contraception: the effective and appropriate use of long-acting reversible contraception
- Urinary incontinence: the management of urinary incontinence in women
- Heavy menstrual bleeding
- Feverish illness in children: assessment and initial management in children younger than 5 years
- Urinary tract infection in children: diagnosis, treatment and long-term management
- Intrapartum care: care of healthy women and their babies during childbirth
- Atopic eczema in children: management of atopic eczema in children from birth up to the age of 12 years

**Guidelines in production include:** 

- Antenatal care (update)
- Diabetes in pregnancy
- Induction of labour (update)
- Surgical site infection
- Diarrhoea and vomiting in children under 5
- When to suspect child maltreatment
- Meningitis and meningococcal disease in children
- Neonatal jaundice
- Idiopathic constipation in children
- Hypertension in pregnancy

Enquiries regarding the above guidelines can be addressed to:

National Collaborating Centre for Women's and Children's Health King's Court Fourth Floor 2–16 Goodge Street London W1T 2QA enquiries@ncc-wch.org.uk

A version of this guideline for parents/carers and the public is available from the NICE website (www.nice.org.uk/CG060) or from the NHS Response Line (0870 1555 455); quote reference number N1462.



