

Supplementary

Appendix 1 Full Systematic Review Search Details

Systematic literature review was conducted on 31/10/2025 on PubMed and Scopus databases to identify peer-reviewed studies reporting paediatric AOM with facial nerve palsy outcomes. The search covered the last 50 years from 1976 to 2025 and limited to English language. On Scopus, the article type was able to be limited to 'article'. The following search terms and Boolean operators were used:

PubMed search string:

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("Child" OR "Infant" OR "Adolescent" OR child* OR infant* OR pediatric* OR paediatric* OR neonate* OR adolescent*) AND ("Acute Otitis Media"[MeSH] OR "Otitis Media, Suppurative"[MeSH] OR "acute otitis media" OR "middle ear infection*" OR "AOM")) AND ("Facial Paralysis"[MeSH] OR "Bell Palsy"[MeSH] OR "facial palsy" OR "facial paralysis" OR "facial nerve palsy" OR "facial nerve paralysis")
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Scopus search string:

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(TITLE-ABS-KEY ( child* OR infant* OR pediatric* OR paediatric* OR adolescent* ) AND TITLE-ABS-KEY ( "acute otitis media" OR "middle ear infection*" OR AOM ) AND TITLE-ABS-KEY ( "facial palsy" OR "facial paralysis" OR "facial nerve paralysis" OR "bell palsy" ) ) AND PUBYEAR > 1975 AND PUBYEAR < 2026 AND ( LIMIT-TO ( DOCTYPE , "ar" ) ) AND ( LIMIT-TO ( LANGUAGE , "English" ) )
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Inclusion criteria:

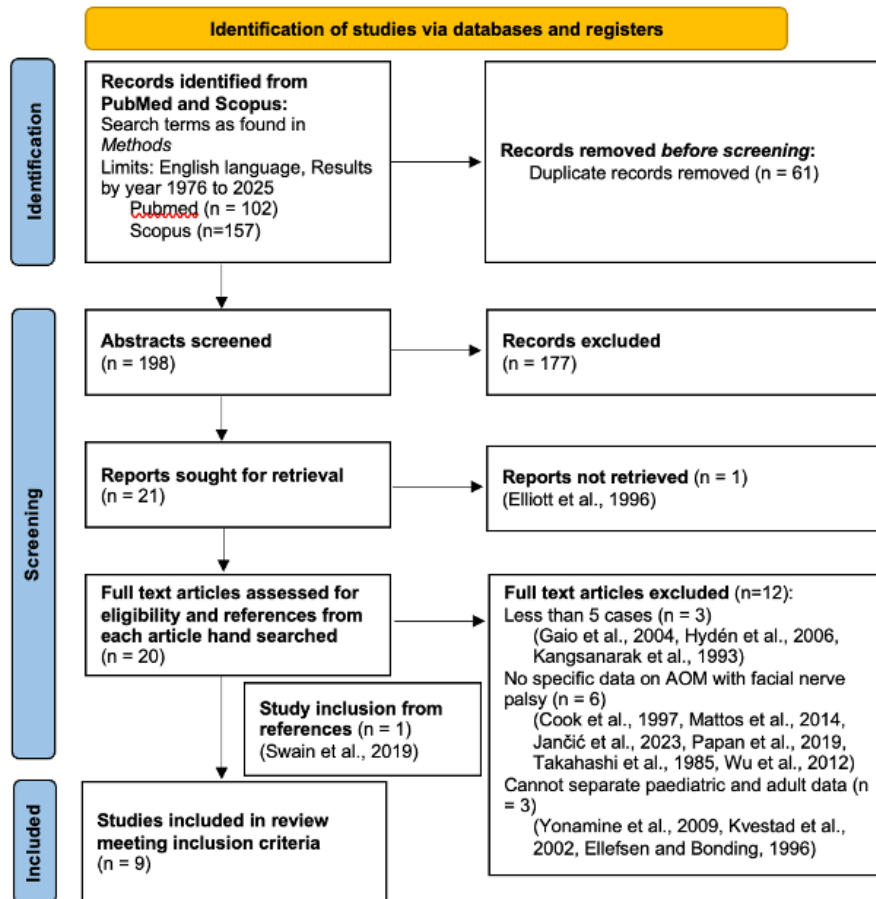
- Peer-reviewed journal articles
- Studies involving paediatrics only or able to review paediatric outcomes only
- Must involve facial nerve palsy outcomes in acute otitis media only
- Reporting at least one of the following: mean House-Brackmann status, treatment modalities, time to recovery

Exclusion:

- Studies not reporting outcomes separately for paediatric population
- Case reports or series <5 patients
- Conference abstracts without full-text publication

- Studies with adults only
- Studies unrelated to Acute Otitis Media only such as mastoiditis, cholesteatoma, cochlear implants

PRISMA Flow Diagram



Full article not retrieved:

Elliott CA, Zalzal GH, Gottlieb WR. Acute otitis media and facial paralysis in children. *Annals of Otology, Rhinology & Laryngology* 1996;105:58-62.

Full text articles excluded:

Gaio E, Marioni G, De Filippis C, et al. Facial nerve paralysis secondary to acute otitis media in infants and children. *Journal of paediatrics and child health* 2004;40:483-6.

Hydén D, Åkerlind B, Peebo M. Inner ear and facial nerve complications of acute otitis media with focus on bacteriology and virology. *Acta oto-laryngologica* 2006;126:460-6.

Kangsanarak J, Fooanant S, Ruckphaopunt K, et al. Extracranial and intracranial complications of suppurative otitis media. Report of 102 cases. *The Journal of Laryngology & Otology* 1993;107:999-1004.

Cook SP, Macartney KK, Rose CD, et al. Lyme disease and seventh nerve paralysis in children. *American journal of otolaryngology* 1997;18:320-3.

Mattos JL, Colman KL, Casselbrant ML, et al. Intratemporal and intracranial complications of acute otitis media in a pediatric population. *International Journal of Pediatric Otorhinolaryngology* 2014;78:2161-4.

Jančić J, Zeković J, Četković M, et al. Acute peripheral facial nerve palsy in children and adolescents: clinical aspects and treatment modalities. *CNS & Neurological Disorders-Drug Targets-CNS & Neurological Disorders* 2023;22:1369-77.

Papan C, Kremp L, Weiß C, et al. Infectious causes of peripheral facial nerve palsy in children—a retrospective cohort study with long-term follow-up. *European Journal of Clinical Microbiology & Infectious Diseases* 2019;38:2177-84.

Takahashi H, Nakamura H, Yui M, et al. Analysis of fifty cases of facial palsy due to otitis media. *Archives of Oto-Rhino-Laryngology* 1985;241:163-8.

Wu J-F, Jin Z, Yang J-M, et al. Extracranial and intracranial complications of otitis media: 22-year clinical experience and analysis. *Acta oto-laryngologica* 2012;132:261-5.

Yonamine FK, Tuma J, Silva RFNd, et al. Facial paralysis associated with acute otitis media. *Brazilian journal of otorhinolaryngology* 2009;75:228-30.

Kvestad E, Kværner KJ, Mair IWS. Otologic Facial Palsy: Etiology, Onset, and Symptom Duration. *Annals of otology, rhinology & laryngology* 2002;111:598-602.

Ellefsen B, Bonding P. Facial palsy in acute otitis media. *Clinical otolaryngology and allied sciences* 1996;21:393-5.