

MODIFIED SURGERY FOR TREATMENT OF RECURRENT OTITIS MEDIA

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Objective: Recurrent acute otitis media (RAOM) is presenting as a repeated development of purulent middle ear inflammation. Surgical treatment - Myringotomy with tympanostomy tube insertion, one of the most common surgeries in pediatric population, is indicated for RAOM, especially in unresponsive to prophylactic antimicrobial therapy cases. [1] The effectiveness of this surgery in RAOM is uncertain: high level of recurrence and complications rate leads to necessity of repeated surgery [2] or even mastoidectomy [3].

The aim of our work was to elaborate the modified mini invasive surgical technique in order to improve the results of treatment of RAOM. The work included: 1. analysis of surgical treatment failure cases and finding of their causes, 2. elaboration of modified surgical technique, 3. assessment of modified surgical technique effectiveness for treatment of RAOM in children.

Material and Methods. For the first part of work we performed retrospective analysis of clinical, otoscopic and surgical findings in children with RAOM, who was operated by the classical Myringotomy and tympanostomy tube insertion: 25 of them with good results of surgery and 10 were with recurrence in post-surgical period. The effectiveness of modified surgical technique was assessed on 27 children with RAOM. Clinical, otoscopic and audiological examination was performed every 3 months during 1 year after surgery. Otomicroscopical evaluation of ears was done under general anesthesia in 12 months after the tympanostomy tube insertion, at the time of tube removal. Presence of retractions, adhesions, granulation tissue and effusion was noted.

Results: Recurrence rate of OM after surgery correlated with early beginning, duration of the disease, presence of concomitant pathology and significance of morphological changes in tympanic cavity and mastoid process. According to these results we modified our surgical technique in order to improve the inspection of tympanic cavity, especially its posterior part, elimination of pathological effusion and application therapy for granulation tissue in this region [4]. Recurrence rate of OM, presence of attic retraction and adhesions after modified surgery was significantly lower than after classical one.

Conclusion: Modified technique of Myringotomy with tympanostomy tube insertion is more effective than classical one in preventing of recurrence, hearing loss, formation of attic retraction, adhesions, and granulation tissue in children with RAOM and mucous effusion in time of surgery. Modified surgery is an effective instrument for prevention and prognosis of OM recurrence in children with RAOM even in case of early beginning, big duration of the disease and presence of concomitant pathology.

[1] E.Lambert, S.Roy Otitis media and ear tubes. *Ped Clin North Amer* v. **60** (2013), p. 809 – 826.

[2] Marchica C., Pitaro J., Daniel S. Recurrent tube insertion for chronic otitis media with effusion in children over 6 years. *Int J Ped ORL*, v. **77** (2013), p. 252 – 255.

[3] Cho Y-S., Hong S. D., Chung K. W., Hong S. H., Chung W-H., Park S. H. Revision surgery for chronic otitis media: characteristics and outcomes in comparison with primary surgery. *Auris Nasus Larynx*, v. **37** (2010), p. 18 – 22.

[4] S. Diacova, I. Ababii Method for treating exudative otitis media in children. *BOPI N9* (2013), p. 24.