

MUNI

COMMENTARY TO HABILITATION THESIS

Otitis media is one of the most common diagnoses in children. Considering its high frequency of occurrence, economic impacts, and the consequences it may inflict, it surely deserves our attention.

Although significant progress in diagnosing and treating middle ear infection has improved prospects for many pediatric patients, we still encounter severe conditions that may be life-threatening for the child or have permanent consequences, including deafness. Modern diagnostic methods, such as computer tomography or magnetic resonance imaging, and use of antibiotics cannot substitute for clinical experience and careful examination and observation of the patient. We have published our own recommended procedures as part of diagnostics and therapy for unexpected major complications of acute middle ear infection, including surgical options. Although we have proven that introduction of vaccination has changed the frequency of otitis media and complications caused by specific pathogens, we nevertheless encounter new, less known microbes. Utilization of new molecular techniques in diagnostics shows that microbes other than those reported to date also are likely to be sources of acute middle ear infection. Despite significant decrease in the complications of middle ear infection, it is important to keep their occurrence in mind and to train physicians in basic surgical skills. Analysis of our own clinical data has shown that in recent years there has been a decline in performance of the basic surgical ear procedure which is antromastoidectomy. Targeted training of new graduates along with use of modern simulation procedures in medicine will be essential to preserve sufficient erudition in our field.

Histopathological studies carried out in our department point to a clear relationship between individual forms of chronic infection of the middle ear and confirm that retraction pocket of the eardrum in children is a dynamic and progressive disease clearly leading to development of cholesteatoma. This evidence must be taken into account when determining therapeutic strategy and calls for timely surgical resolution of less severe conditions.

In spite of all our efforts, permanent consequences of middle ear infection, mainly hearing loss, do develop in a portion of child patients. Proper hearing function during childhood is essential for the child's overall development and learning. Therefore, it is necessary to identify hearing loss in a timely manner and offer patients adequate hearing rehabilitation. Our studies show that traditional reconstruction surgeries of the middle ear done by experienced hands have very good and long-term satisfactory results and that patient age is not an issue here. In cases when it is not possible to use either traditional surgery or a hearing aid, we have access to modern devices being developed by cooperating companies, physicians, and audiologists. Our own data have proven that these devices bring to children sufficient hearing gain, speech development and other skills, present minimal complications and no cosmetic defect, and significantly improve the quality of life for pediatric patients.

[1] Forstová G, **Urík M**, Mikolášek P, Pavlovská D, Ševčíková A, Šlapák I. Haemophilus diseases in ENT in children before and after the introduction of Haemophilus influenzae type b vaccine. *Cesko-Slovenska Pediatrie*. 2017;72(1):20–24.

Experimental work (%)	Supervision (%)	Manuscript (%)	Research direction (%)
60	60	60	60

[2] **Urík M**, Šlapák I, Lastovička D, Jančíková J, Pavlovská D, Hošnová D, Žarošská E, Toukálková M. Post-myringotomy oto-liquorrhea in children - A case study and literature review. *International Journal of Pediatric Otorhinolaryngology*. 2018;115:153-155. (IF:1,225)

Supervision (%)	Manuscript (%)	Research direction (%)
70	70	70

[3] **Urík M**, Macháč J, Šlapák I, Hošnová D. Pott's puffy tumor: A rare complication of acute otitis media in child: A case report. *International Journal of Pediatric Otorhinolaryngology*. 2015;79(9):1589–1591. (IF:1,125)

Supervision (%)	Manuscript (%)	Research direction (%)
70	70	70

[4] **Urík M**, Šlapák I, Macháč J. Antromastoidectomy in childhood. *Otorinolaryngologie a Foniatrie*. 2016;65(4):237–240.

Supervision (%)	Manuscript (%)	Research direction (%)
60	70	70

[5] **Urík M**, Hurník P, Žiak D, Machač J, Šlapák I, Motyka O, Vaculová J, Dvořáčková J. Histological analysis of retraction pocket pars tensa of tympanic membrane in children. *International Journal of Pediatric Otorhinolaryngology*. 2016;86:213–217. (IF:1,159)

Experimental work (%)	Supervision (%)	Manuscript (%)	Research direction (%)
60	80	80	80

[6] **Urík M**, Hurník P, Žiak D, Machač J, Šlapák I, Motyka O, Jabandžiev P. Immunohistochemical analysis of retraction pocket pars tensa of tympanic membrane in children. *International Journal of Pediatric Otorhinolaryngology*. 2019;122:111–116. (IF:1,241)

Experimental work (%)	Supervision (%)	Manuscript (%)	Research direction (%)
60	80	80	80

[7] **Urík M**, Tedla M, Hurník P. Pathogenesis of Retraction Pocket of the Tympanic Membrane — A Narrative Review. *Medicina*. 2021;57(5):425. (IF:1.205)

Supervision (%)	Manuscript (%)	Research direction (%)
70	70	70

[8] **Urík M**, Kaliariková A, Machač J, Jurajda M. Experience with cholesteatoma behind an intact tympanic membrane in children. *American Journal of Otolaryngology*. 2020;41(2):1-5. (IF:1,267)

Supervision (%)	Manuscript (%)	Research direction (%)
70	70	70

[9] **Urík M**, Machač J, Šlapák I. Middle ear reconstruction in child. *Otorinolaryngologie a Foniatrie*. 2017;66(1):12–15.

Supervision (%)	Manuscript (%)	Research direction (%)
70	70	70

[10] **Urík M**, Hošnová D, Šlapák I, Jančíková J, Odstrčilík J, Jarkovský J, Baumgartner WD. First experiences with a new adhesive bone conduction hearing device in children. International journal of pediatric otorhinolaryngology. 2019;126:1-7. (IF: 1,241)

Experimental work (%)	Supervision (%)	Manuscript (%)	Research direction (%)
60	70	70	70

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