doi:10.1017/S0022215116005363

ID: IP040

Clinical and diagnostic peculiarities of middle ear cholesteatoma course in children

Presenting Author: Eugene V. Garov

Eugene V. Garov, Alexey Ivoylov, Andrey I. Kryukov, Natalia L. Kunelskaya, Eugene V. Garov, Valentina R. Pakina, Ekaterina E. Garova L. I. Sverzhevski Scientific Research Clinical

L.I. Sverzhevski Scientific Research Clinical Institute of Otorhinolaryngology of Moscow Municipal Health Department, Russia

Learning Objectives:

Goal: To study clinical and diagnostic peculiarities of middle ear cholesteatoma in children with chronic suppurative otitis media.

Materials and methods: 139 children with chronic suppurative otitis media (CSOM); (3 to 18 years). Collection of anamnesis of life, diseases, complaints, otoendoscopy, CT of temporal bones, audiologic and microbiologic studies.

Results: Chronic tube tympanic suppurative otitis media (CTTSOM) was diagnosed in 90 patients, chronic atticoantral suppurative otitis media (CASOM) was diagnosed in 49. Bilateral process was identified in 20 patients, left sided process was diagnosed on 79 patients and right sided process was diagnosed in 60 patients. Duration of CSOM constituted 3–14 years in 78.5%, it started in age of 1-3 years. At CTTSOM perforation of ear-drum pars tensa occurred in 10(9.7%) patients, and central one occurred in 93(90.3%). At CASOM defect of pars flaccid occurred in 38(63.8%), and subtotal one occurred in 18 (36.2%). Monoflora: St.aureus (27), Ps.aeruginosa (22), St.epidermidis (11), Kl.pneumonia (10), Morganella morganii (7), Str.pyogenes (6), E.coli (5), 33 patients showed mixed flora at CASOM, 25 - didn't show flora growth at CTTSOM. Study of hearing: conductive hearing loss at CTTSOM and mixed form of hearing loss with hearing thresholds by bone conduction constituted $10.0 \pm 0.6 \text{ dB-}20.0 \pm 1.8 \text{ dB}$ at CASOM, 100%speech discrimination without recruitment. CT-symptoms of middle ear cholesteatoma were diagnosed in 33 patients with CASOM, and in 8 - with CTTSOM. In all cases of follow-up cholesteatoma diagnosis was confirmed with intraoperative findings.

Conclusions: CASOM in children is followed by cholesteatoma development in 67.3% of cases, and CTTSOM is followed by cholesteatoma in 8.9%. Registration of sensorineural component, 100% speech discrimination, and absence of recruitment indirectly indicate to cholesteatoma process in ear. CT of temporal bones is a "golden standard" in diagnostics of ear cholesteatoma.

doi:10.1017/S0022215116005375

ID: IP041

Modern methods of chronic suppurative otitis media with cholesteatoma surgery

Presenting Author: Eugene V. Garov

Eugene V. Garov, Andrey I. Kryukov, Alexey Ivoilov, Nadezhda G. Sidorina, Ekaterina E. Garova

L.I. Sverzhevski Scientific Research Clinical Institute of Otorhinolaryngology of Moscow Municipal Health Department, Russia

Learning Objectives:

Goal: Choice of optimal variant of surgical intervention at middle ear cholesteatoma al-lowing to achieve curing and hearing improving (hearing keeping) effect at minimum surgical injury.

Materials and methods: 3,468 surgeries were performed on temporal bone structures, 2,415 (70%) of them were performed in patients with CTTSOM. Different variants of tympanop-lasty were performed in 1,708 (70.7%) of patients and treating surgeries with tympanoplasty at middle ear cholesteatoma were performed in 594 (24.6%) patients.

Results: Cholesteatoma surgery confirms predomination of using of "closed" (54.6%) and "semi-open" (41%) variants of surgery. Transchannel (intrameatal and endaural) method is ap-plied at limited cholesteatoma, and transmastoidal method is applied at advanced condition. Cholesteatoma relapses (up to 32%) at revision surgery after "closed" variants predefined the in-terest to "semiopen" methods, when posterior wall of external ear duct is removal for better treatment and the cavity created undergoes tympanoplasty and mastoidoplasty. Use of patient's material (fascia, gristle, periosteum and bone chips) at any variants of surgery provides rigidity of the constructions created to retraction and good adaptation in site of transplantation, as well as low cost of the method. Cholesteatoma in tympanic form is identified in 38% patients, that de-fines the necessity of early surgical intervention and careful revision of drum cavity. Choice of transchannel method and surgery only in scope of tympanoplasty is explained by its high effi-ciency in 92.4% patients with mesotympanitis.

Conclusions: Cholesteatoma of middle ear occurs at any form of CSOM. The choice of its successful surgical treatment is based on diagnostics combined with modern methods of veri-fication and use of efficient treating methods of surgery with elements of reconstruction of mid-dle ear structures.