

174. DIFFICULT CASES OF COCHLEAR IMPLANTATION

K.M. Diab, D.S. Kondratchikov, O.A. Pashchinina, A.E.Mikhalevich, A.G. Zukhba, A.A. Hijazi, V.N. Sokolova, O.A. Balakireva

State Scientific Clinical Center of Otorhinolaryngology, Moscow, Russia

Background. Currently there is a tendency to addition of cochlear implantation indications (CI) in patients with inner and middle ear malformations, cochlear ossificans and Meniere's disease. Also, CI after canal wall down mastoidectomy is difficult clinical case in ear surgery.

Aim. Improve postoperative auditory performance of patients with profound sensorineural hearing loss (deafness), and complicated pathology of the inner or middle ear through the optimization of cochlear implantation surgical tactic.

Materials and methods. 42 patients with profound sensorineural hearing loss who underwent CI were analyzed. Cases were divided into four groups: 12 patients with cochlea ossification after meningitis (group 1), 19 patients with inner ear malformation (group 2), 9 patients underwent canal wall down mastoidectomy (CWDM, group 3) and two patients with Meniere's disease (group 4). Surgical techniques differ depending on the pathology. In all cases were performed intraoperatively implant telemetry and stapes reflex registration. Postoperatively the mastoid cavity was controlled.

Results. Stapes reflex was registered intraoperatively in 8 patients of the first group. Number of input electrodes depended on the degree of cochlea ossification and the type of inner ear abnormality. The CSF leak occurring in 10 cases of inner ear anomalies was successfully repaired and completely stopped. The using of proposing CI technique in patients after canal wall down mastoidectomy gives good results of performed cavity healing, no cases of electrode extrusion or protrusion in the long term follow up period. Patients with Meniere's disease and bilateral sensorineural hearing loss who underwent simultaneous operations (endolymphatic sac drainage and cochlear implants), showed satisfactory results audioverbal rehabilitation and marked decreasing of vestibular symptoms.

Conclusion. Using the proposed surgical techniques allow to maximal electrode insertion into malformed and ossified cochlea. The performed tunnels and cartilage electrode covering in postoperative cavity of patients after CWDM prevent cases of extrusion and protrusion of the electrode. Simultaneous CI and endolymphatic sac drainage gives a good results in patients with late stage Meniere's disease and profound bilateral sensorineural hearing loss

Key words: cochlear implantation, inner ear malformations, cochlear ossificans, Ménière's disease, tympanomastoidal cavity

175. DIAGNOSIS AND TREATMENT ALGORITHM FOR INFLAMMATION OF THE RHINOSINUSOTUBAL AREA

Anna Bervinova

Scientific adviser: Galina Lavrenova, First Pavlov State Medical University of St. Petersburg, Russia