

8. Audiometry showed left conductive hearing loss. CT showed the fusion of the head of malleus and the wall of epitympanum in left side. He underwent left type I tympanoplasty, and got an effective hearing level. However, after 6 months, the hearing level in the left ear was the same as pre-operative one. The recurrence of fixation of the malleus head was suspected.

Case2: The case was 9-year-old girl. She had recurrent otitis media at the age of 3. Though her otitis media was improved, she had still left conductive hearing loss. Thus, she had been referred to our department at the age of 6. CT showed the fusion of the head of malleus and the wall of epitympanum in left side. She underwent left type IIIc tympanoplasty, and got an effective hearing level.

Conclusion: It was suggested that type IIIc tympanoplasty is more appropriate approach for a malleus ankylosis than type I tympanoplasty.

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The improvement of the bone hearing thresholds after removing cholesteatoma from the round window: our experience Salii O. V. 1, Verchovtseva L. I. 1, Tarasevich T. N. 2

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Learning Objectives:

Background: 30% of all patients treated in our ENT-department are patients with the pathology of middle ear. Out of all our patients with chronic otitis media 54% have cholesteatoma. Hearing function recovering is considered as impotent as complete cholesteatoma removing.

In some cases of cholesteatoma it was observed that after surgery there is an improvement not only of sound conduction but also of sound perception.

Objective: The investigation of possible reasons of sound perception improvement of patients after removing cholesteatoma with tympanoplasty.

Materials and methods: An assessment of 256 patients hearing results was carried out retrospectively. The patients underwent surgery on account of chronic otitis media with cholesteatoma from 2009 to 2015. Hearing assessment was analyzed by data mean value for 4 frequencies: 500 ;Hz, 1000 ;Hz, 2000 ;Hz, 4000 ;Hz before surgery and 3 and 6 months after surgery. Moreover, air-bone interval, air-conductive thresholds and bone-conductive thresholds were assessed before and after surgery, and the absolute increase of air conduction was measured after surgery.

Carefully recoded surgery protocols were analyzed.

Results and discussion: According to the analysis of data it was found that an improvement of hearing thresholds mean value occurs not only for air conduction but also for bone conduction in 32 % of the cases. All patients were divided in 2 groups: with increasing bone conduction and without increasing bone conduction. Several points in these groups were analyzed.

According to the analysis of surgeries' protocols, in 87% of cases there was sound perception improvement of those patients who had cholesteatoma localized in the round window area and had it completely removed during surgery.

Conclusions: Removing cholesteatoma from the round window region promotes sound perception improvement due to the free movement of the round window membrane that, in its turn, improves the movement of perilymph.

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Sigmoid sinus thrombosis and facial paralysis associated to mastoiditis: A case report

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Learning Objectives: Initial surgical approach (antromastoidectomy) was not appropriate for this case. Right mastoidectomy, broad-spectrum antibiotics and anticoagulants has been the treatment of choice.

Introduction: Otogenic sigmoid sinus thrombosis is a rare complication of mastoiditis. This paper aims to offer clinical manifestation and management of sigmoid sinus thrombosis and facial palsy secondary to mastoiditis.

Methods: A 72-year-old patient known with right antromastoidectomy in other ENT Clinic, was referred to our ENT Department with right-sided otalgia, headache and with right facial paralysis (loss of forehead wrinkles and inability to frown, inability to close the right eye, the corner of the mouth pulls down). Computed tomography with contrast administration indicated parafloide accumulations at right mastoid cells and thrombophlebitis modifications in sigmoid right sinus.

Results: This case demonstrates rare but serious sequel of mastoiditis: sigmoid sinus thrombosis and right facial paralysis. Middle ear secretion culture was positive with growth of *Pseudomonas aeruginosa*. In this case, a right mastoidectomy was associated with large spectrum antibiotics prolonged for 3 months. The anticoagulant therapy was established also.

Conclusions: The particularity of this case lies in that neurological symptoms had a slow recovery and also the difficulty

of eradicating infection with *Pseudomonas aeruginosa*. The patient will be re-evaluated periodically and also it requires long term follow-up using IRM examination.

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Hearing Results of Type III Tympanoplasty

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Learning Objectives: to analyze the prognostic factors in type III tympanoplasty.

Hearing Results of Type III Tympanoplasty.

Objective: We report the hearing results of type III tympanoplasty to analyze the prognostic factors in type III tympanoplasty.

Methods: Patients who had been performed type III tympanoplasty in our department between October 2004 and February 2015 were retrospectively analyzed. Almost patients underwent tympanoplasty with postauricular incision and canal wall up procedure.

Results: 317 patients underwent type III tympanoplasty in our department. The mean age was 47 years (range, 3 to 82 years). 87.4% of patients had an air-bone gap (ABG) of less than 20 dB. The average postoperative ABG is 12.8 dB. Hearing results were successful in 93.4% based on criteria proposed by the Otological Society of Japan. The hearing results of canal wall up Type III tympanoplasty were significantly more favorable than canal wall down. On comparison of columella, ceramic bone showed significantly poorer than autograft.

Conclusion: Canal wall up Type III tympanoplasty yields relatively good hearing results.

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Cochlear Implantation in Chronic Otitis Media

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Learning Objectives: 1. Understand the necessity of initial management of chronic otitis media prior to cochlear implantation 2. Be aware of the advantages and limitations of

simultaneous and staged surgical management of chronic otitis media and cochlear implantation 3. Appreciate the necessity of long-term follow-up of patients with chronic otitis media undergoing cochlear implantation.

Introduction: Cochlear implantation in patients with a history of chronic otitis media may present substantial surgical challenges. The purpose of this study was to review the management and surgical outcomes of adults at the University of Ottawa Auditory Implant Program undergoing cochlear implantation who have a history of chronic otitis media.

Methods: A retrospective chart review of adults undergoing cochlear implantation since 1992 was performed to identify those patients who had required surgical management of chronic otitis media with or without cholesteatoma prior to implantation. Medical records were reviewed to identify surgical procedures required for chronic otitis media management and ascertain long term outcomes after cochlear implantation.

Results: Seven patients (3 male, 4 female) were identified who required surgical management of chronic otitis media prior to cochlear implantation. The mean age at cochlear implantation was 66.4 years (39–80). Five patients required an intact wall mastoidectomy for management of chronic otitis media. Of these, two underwent a tympanoplasty for management of a tympanic membrane perforation and two required placement of a ventilation tube for chronic middle ear effusion. Two patients required mastoid obliteration and blind sac closure of the external auditory canal (subtotal petrosectomy). Cochlear implantation was performed approximately 6 months later. The mean length of follow-up is 3.7 years (11 months – 7 years). All patients derived substantial benefit from their cochlear implant without long-term complications.

Conclusions: All patients successfully first underwent surgery for chronic otitis media and subsequent cochlear implantation approximately 6 months later without long-term complications. Although simultaneous surgical management of chronic otitis media and cochlear implantation may be considered in selected cases, staged surgical management is a consistently effective option for this difficult condition.

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Narrow Facial Recess

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Learning Objectives: To make otologic surgeons must be familiar with facial recess anatomy on temporal bone CT images. To interpret interpret radiological abnormalities pre-operatively to minimize complications during CI surgery. To estimate the width of the facial recess by measuring the distance between the external auditory canal and vertical segment of the facial nerve. To discuss alternative approaches to CI in case of narrow facial recess.