

Learning Objectives:

Objective: To present the result of a 5 year follow up study in a pediatric population (www.innoforce.ch) Intervention: Patients presented with acquired cholesteatoma underwent an OMET by two experienced surgeons. Results: 37 children (38 ears) underwent OMET cholesteatoma surgery with a follow-up of at least 5 years. Thirty-two primary surgeries and 6 revision operations of referred patients were included. There was a slight right ear dominance of 55%. Eighteen percent had a pathologic middle ear on the other side as well. Half of all patients had an ossiculoplasty at the time of first surgery, whereas no attempt or a staged reconstruction was planned in the other half of our patients. Overall 4 (10%) patients developed a recurrent and 3 (7%) had a residual cholesteatoma necessitating further surgery. Four patients developed recurrent disease 3 and 7,5 years after the first surgery. All patients had a dry and water-resistant ear at last follow-up.

Conclusion: Our results on recurrent/residual cholesteatoma in the pediatric population (17%) are higher than in our adult population (9%). There are a lot of conflicting data in the literature. The comparison appears difficult, since most publications do not present long-term follow-up of 5 years or longer in children. Our results compare favorably with the 10year follow-up of Fisch as we are using the same technique. Our presentation will also balance our results with recent data from bony obliterations techniques and add to the ongoing debate.

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Free Papers (F642)**ID: 642.4****Middle ear aeration in staged canal wall up tympanoplasty combined with mastoid cortex plasty or bony mastoid obliteration**

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Learning Objectives:

Introduction: If poor postoperative aeration can be accurately predicted, canal wall down tympanoplasty or obliteration technique is preferable to canal wall up tympanoplasty (CWUT) is described, however, little is known about the dynamics of middle ear aeration. We sought to determine how the aeration levels changed during the first- and second-stage operations (1stSOP and 2ndSOP), and the most recent CT examinations (recent CT).

Methods: Our study was included 50 ears which had a cholesteatoma extending into the antrum or mastoid cavity involving the ossicular chain with varying degrees of scutum defect.

Middle ear aeration was assessed during 1stSOP and 2ndSOP, and recent CT which was performed at least 5 years subsequent to the 2ndSOP. Middle ear aeration was graded using the following scale: 0, no aeration in the middle ear; 1, only the meso-tympanum is aerated; 2, the entire tympanic cavity, including the attic, is aerated; and 3, the tympanic and mastoid cavities are aerated. The staged CWUT with mastoid cortex plasty was selected for 23 ears with grade 3 aeration (well-aerated ears group) during 2ndSOP, the staged CWUT with bony mastoid obliteration for 27 ears with grade 0~2 aeration (poorly-aerated ears group).

Results: Aeration between 1stSOP and 2ndSOP was improved in 70% of all. Then, by mastoid cortex plasty, 91% of grade 3 ears during 2ndSOP maintained that level up to recent CT. By bony mastoid obliteration, 69% of grade 2 ears and 90% of grade 1 ears maintained their aerations. A deep pocket formation occurred in 0% of grade 3 and 2 ears, 20% of grade 1 ears and 33% of grade 0 ears. There was no significant group difference in aeration level during 1stSOP, and the proportion of the two groups during 2ndSOP was 48% vs. 47%.

Conclusions: Staging is instructive for understanding long-term changes in aeration status. The selection of mastoid cortex plasty or bony mastoid obliteration is suitable and reliable for stabilizing postoperative aeration levels.

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Free Papers (F642)**ID: 642.5****Chronic otitis media were cleared and tympanic cavity forming 120 cases of clinical experience**

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Learning Objectives: Otitis media is the most common otology diseases, with the development of imaging and ear microsurgery, the close type - keep plane wall of mastoid tympanic cavity forming or open - removal of the external auditory canal mastoid lesions cleared a parallel tympanic cavity forming period tympanoplasty, eventually reach function reconstruction, restore hearing. We have between January 2011 and January 2011, 120 cases of surgical observation data integrity is coming back reports as follows.

1 data and methods**1.1 clinical data**

Group, 120 cases of patients, aged 15 to 71 years old, the average age of 34, 73 cases of male, female 47 cases, 68 cases of simple type chronic otitis media and cholesteatoma otitis media 52 cases.

1.2 operation method

The closed type - keep plane wall of mastoid tympanoplasty 102 cases, many options open mastoid area lesion - removed

concha mastoid tympanoplasty 18 cases, add apare keratoplasty, small tympanic cavity forming technique.

2 the results

This group of patients after 1 year to 3 years back, the close type-keep plane wall of mastoid tympanoplasty 102 cases, hearing had no obvious change in 62 cases (51%); , people with hearing improve 13 cases (11%), apparent decline in hearing in 2 cases, accounting for 1%. Hearing a reformer, 41 cases hearing improve 29 cases, accounted for 70.73%, hearing no change of 12 cases, accounted for 29.26%, open - removed concha mastoid tympanoplasty 18 cases, hearing had no obvious changes in 4 cases (22.2%); The improvement in 1 case, 5.6%, the hearing in 13 cases, accounting for 72.2%.

3 discuss

Decided to operation method, according to the scope of the lesions in patients with closed type - keep plane wall of mastoid tympanic cavity forming and open - removed concha mastoid tympanic cavity forming each have advantages and disadvantages. Don't repeat here.

Again is eustachian tube dysfunction, eustachian tube and middle ear cavity infection causal, intraoperative careful cleaning lesions, strengthening postoperative follow-up, curative effect is exact middle ear surgery.

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Free Papers (F642)

ID: 642.6

Studies by Nature of “Eustachian Tube Dysfunction”: A Preliminary Report

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Learning Objectives: Challenge the concept of Eustachian tube dysfunction. A study of the middle ear in unconscious, tracheotomized patients with severe brain damage who were unable to swallow, i.e., severely diminished ability to actively open the ET. Therapeutically Thoughts.

Background and Objective: The Eustachian tube (ET) is a conduit communicating the middle ear (ME) with the nasopharynx. The ET is usually passively collapsed, whereas its opening is an active process. The intermittent, transient ET opening is accepted as critical for maintaining ME pressure circa ambient pressure, i.e., keeping the normal ME function. Interference of fluid passage through the ET was termed “ET dysfunction”, implying the pathophysiology of chronic ME diseases, such as otitis media with effusion (OME), tympanic membrane atelectasis or development of cholesteatoma. Our objective was to study a unique group of patients with severely diminished ability to actively open the ET.

Patients and Methods: Unconscious, tracheotomized patients with severe brain damage who were unable to swallow, produce valsalva or yawn, and fed by gastric tubes were enrolled after obtaining an informed consent from the authorized guardian(s). Each patient underwent otoscopic examination, tympanometry, nasopharyngoscopy and evaluation of gag reflex and soft palate movement. Some patients underwent fiberoptic endoscopic evaluation of swallowing with sensory testing (FEESST).

Results: Of the 14 patients recruited, 11 were eligible and fully evaluated: nine males and 2 females, aged 18–79 years (average 53). The period of tube feeding and mechanical ventilation was 3–84 months (average 28). None had prior known or recorded otogenic illness. All patients lacked a gag reflex or palatal movement. Otoscopy of 22 ears revealed 10 with OME (45%, 5 patients) and 12 normal ears (55%, 6 patients). Tympanometry type B was documented in 11 ears, type As in 3 and A in 8.

Conclusion: Despite that all ears tested apparently had a dysfunctional ET, about half had a normal ME. This strongly reveals that the ET is an important but not the only factor maintaining and regulating ME pressure.

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Chronic otitis media in indigenous (N643)

ID: 643.1

Australian Aboriginal & Torres Strait Islander Chronic Ear Disease

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Learning Objectives: Australia's Indigenous population has the highest rate of chronic ear disease of any Indigenous people on the planet. The World Health Organisation recognises any population with a rate of chronic ear disease greater than 4% to have a public health crisis. In remote Aboriginal & Torres Strait Islander Communities the incidence of chronic ear disease can be as high as 70%. Affected children usually have their initial suppurative infection with otorrhoea in the first six weeks of life. The impact of associated hearing loss at critical times of language development and early education has life-long individual and community adverse outcomes. The ‘tyranny of distance’ is not a significant causative factor (although it is very significant with respect to service provision), as there is a similarly high rate of disease in urban Aboriginal communities.

The disease pattern is predominantly tubo-tympanic; however, cholesteatoma does occur. Unfortunately, in this population, cholesteatoma often presents with a complication or as an incidental finding during reconstructive surgery. Outcomes are generally worse than those reported in non-Aboriginal populations. The poorer outcomes are considered to be multi-factorial in origin.

This presentation will explore the otologist's role in helping to manage the burden of this disease. It will describe the Ear Health Teams and how they function in Western Australia. It will also discuss how telemedicine has influenced management.