

3D image series. All the above will be discussed and illustrated during this presentation.

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Management of difficult cases (R861)

ID: 861.1

Single stage and staged cochlear implant for chronic suppurative otitis media suffers

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Objective: To explore and summarize the operation method and operation stage for cochlear implant with chronic suppurative otitis media, to provide the reference for cochlear implant with chronic suppurative otitis media.

Methods: the clinical data of 6 cases of cochlear implant with chronic suppurative otitis media in our hospital was analyzed retrospectively. The operation stage, surgical skill, possible risk and prognosis was analyzed and summarized.

Results: 3 of 6 cases received single stage subtotal petrosectomy and cochlear implant. 3 of 6 cases received subtotal petrosectomy, they received staged cochlear implant 4 to 6 months later. No complications occurred, all of the cochlear implantee had good open set speech perception.

Conclusions: staged operation was the first choice for cochlear implant with chronic suppurative otitis media. Single stage operation took potential risks, it should be done cautiously. The key points for the operation was the clearance of the pathological tissue totally, this required experience hands and operation approach option.

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Management of difficult cases (R861)

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Subtotal petrosectomy for large cholesteatoma and follow up using MR imaging

Presenting Author: **Thomas Somers**

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Introduction and aim: Subtotal petrosectomy involves the complete exenteration of the tympanomastoid air cells with

blind sac closure of the external auditory canal and fat or muscle obliteration of the remaining cavity. The aim of this study is to review the different indications, hearing rehabilitation and long-term outcome results. Special emphasis is put on the use of diffusion-weighted MRI (DW-MRI) to follow up those ears after absence of possible micro-otoscopic control due to blind sac closure.

Material and methods: Retrospective analysis of all patient who underwent subtotal petrosectomy between 1995 and 2015 in a tertiary referral otological centre.

Results: Subtotal petrosectomy was performed in 102 consecutive cases. The indications were chronic middle ear disease with (n = 39) or without (n = 38) cholesteatoma, cochlear implantation in the unstable ear (n = 19), neoplasms of the petrous bone (n = 4) and cerebrospinal fluid leakage (n = 2). Residual cholesteatoma was found in 7 cases, 5 were originally cholesteatoma cases with wide extension and facial nerve involvement.

Conclusions: Subtotal petrosectomy is a reliable technique which can be used for different indications. With the introduction of DW-MRI surgical outcome can more accurately be assessed and screened for residual pathology. The latter can need revision surgery if one consider it potentially harmful for the patient. In elderly patients or in cases with an intermediate signal on DWI images a wait and scan attitude has been adopted in selected cases. Hearing rehabilitation strategy depends on the remaining inner ear function of both ears and the patient's demand as also on the risk for residual cholesteatomatous pathology. Staging after MRI-control can be a safer approach.

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Management of difficult cases (R861)

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Management of CSF leaks and encephaloceles

Presenting Author: **Joe Kutz**

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Learning Objectives: 1. Describe the typical clinical presentation of CSF leaks and encephaloceles 2. Understand the advantages and disadvantages of imaging modalities to diagnosis and locate CSF leaks and encephaloceles 3. Compare surgical approaches and techniques to repair CSF leaks and encephaloceles.

Spontaneous cerebrospinal fluid (CSF) leaks and encephaloceles are uncommon but important conditions to recognize because of the risk for meningitis. Typical symptoms include a chronic effusion, tympanostomy tube otorrhea, or recurrent meningitis. Once a CSF leak is suspected, diagnosis may be challenging and is aided by laboratory testing of the fluid and imaging. Surgical approaches depend on multiple

factors including age, location of the defect, and surgeon's preference. In this case-based presentation, the challenges of diagnosing and managing CSF leaks and encephaloceles will be discussed. Advantages and disadvantages of imaging modalities will be compared. Finally, surgical approaches including middle fossa craniotomy, transmastoid, and combination approaches will be examined.

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Management of difficult cases (R861)

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The surgical management of temporal bone cholesteatoma involving into jugular foramen

Presenting Author: **Chunfu Dai**

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Fudan University

Learning Objectives: To share surgical experiences on management of temporal bone cholesteatoma involving into jugular foramen.

Cholesteatoma involving into jugular foramen are rare. Clinical findings such as symptoms, signs, and preoperative hearing are frequently nonspecific in cases of temporal bone cholesteatoma, the surgical removal of cholesteatoma in this region is great challenge for the skull base surgeons. Eighteen cases with temporal bone cholesteatoma involving into jugular foramen were operated, the surgical approaches, intraoperative findings, surgical outcomes were retrospectively reviewed in the present study.

Eight cases are female, 10 cases are male, 8 cases in the left side, 10 in the right. The age ranges from 26-68 years old. The symptoms included hearing loss (17/18), otorrhea (8/18), pulsatile tinnitus (7/18), headache (2/18). Ten patients complained of facial paralysis, no patients suffered from the dysfunction of lower cranial nerves. All patients were undergone infratemporal fossa approach with facial fallopian canal bridge technique, Jugular foramen was erosion in all 18 cases, horizontal segment of ICA was encroached in 6 cases, sigmoid sinus and posterior fossa were compressed in 17 case. The clivus was destructed in 2 cases.

Facial nerve intact was remained in 6 patients, cable graft was conducted in 2 patients, facial hypoglossal nerve anastomosis was performed in two patients. Intraoperatively CSF leakage was incurred in 9 patients, sigmoid sinus or jugular bulb erupted in 3 cases, and sigmoid sinus occlusion with jugular vein ligation was undertaken. Eustachian tube was packed with temporal muscle and bone wax, the surgical cavity was packed with abdominal fat, blind sac closure was conducted in all patients. No major complications was observed.

Infratemporal fossa approach with facial nerve canal bridge technique is good option for patients with cholesteatoma involving into jugular foramen, which is sufficient to remove the lesion and control the vessels, as well to preserve facial nerve function.

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Free Papers (F862)

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Smoking does not influence the take rate of transcanal endoscopic tympanoplasty

Presenting Author: **Wu-Po Chao**

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Learning Objectives: To evaluate the anatomical and audiological outcomes of transcanal endoscopic tympanoplasty with patient who has smoking habit, and to those who do not.

Smoking does not influence the take rate of transcanal endoscopic tympanoplasty.

Objective: This study is aimed to evaluate the anatomical and audiological outcomes of transcanal endoscopic tympanoplasty with patient who has smoking habit, and to those who do not.

Material and method: We had retrospectively reviewed the patients who had tympanic membrane perforation and underwent transcanal endoscopic tympanoplasty in Chang-Gung Memorial Hospital. After the surgery, the follow-up reperforation rate and audiological test will be used to evaluate the take rate of the surgery between smoking and non-smoking group. All calculation were performed with a commercial statistical software package (SPSS 12.0 for windows).

Results: The result showed the take rate of transcanal endoscopic tympanoplasty between smoking and non-smoking group was 89% and 86% respectively.

Conclusion: It seems that smoking maybe an important factor to the patient with otitis media. However, it may not influence the outcome of take rate post-operatively. We will present our data and discuss on the conference.

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Free Papers (F862)

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Preliminary outcomes of endoscopic middle ear surgery, our UK experience

Presenting Author: **Constantina Yiannakis**

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