

each group. Detailed history and clinical examination along with PTA (pure tone audiometry) were performed. Pre- and postoperative graft success results and hearing improvement results were assessed and compared.

Results Significant hearing improvement was seen in both types of surgeries. Graft success rates and hearing results were slightly better in temporalis fascia tympanoplasty than cartilage tympanoplasty. But the difference was not statistically significant.

Conclusion Tympanoplasty is the surgical procedure done for the management of CSOM with subtotal perforation. Both temporalis fascia and cartilage are excellent graft materials for closure of perforations and hearing improvement. But there was no statistically significant difference in surgical success rate and hearing gain between the two groups.

A0025: Otomycosis: Study of Etiopathological Factors and Mycological Spectrum

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Aim Otomycosis, study of etiopathological factors and mycological spectrum.

Objectives

1. To study various etiological factors.
2. To study the mycological spectrum.

Materials and Methods Source of data study was undertaken at the Department of Otorhinolaryngology, Sri Siddhartha Medical College and Hospital, Tumkur, from June 2017 to June 2018. It was a time-bound study, wherein 51 cases were studied. **Method of Data Collection** Informed consent was taken, detailed clinical history was recorded, and clinical findings were noted. Otomycotic debris was subjected to mycological spectrum by KOH, and direct inoculation into *Sabouraud* dextrose agar. One swab for wet mount preparation in 10% KOH solution. The second swab was directly inoculated into *Sabouraud* dextrose agar medium.

Results Out of 51 patients, 47 reported positive fungal isolates. This constituted 92.1% cases, which were taken up for study. The study showed higher incidence of otomycosis in females (53.2%) than in males (46.8%). In this study, otomycosis was found to be unilateral in 44 cases (93.6%) and bilateral in three cases (6.4%). In this study, most common predisposing factor was use of unsterile material for cleaning the ear (buds, match sticks, hair pins, pencils, etc.) in 55.3% of cases, followed by use of ear drops (antibiotic and steroids) in 51.1% cases, water entering the ear canal in 42.5% of cases, use of head cloth in 21.3% of cases, and previous ear surgery in 8.5% of cases.

Conclusion In conclusion, otomycosis/mycotic otitis externa is still a common problem and is often misdiagnosed for other chronic otitis conditions. Age does not act as a barrier or gender does not give immunity to this disease and it is usually a unilateral disorder. Cleaning of external auditory canal with unsterile material and use of topical antibiotic/

steroid ear drops were commonest predisposing factors. The fungi isolated were *Aspergilli* and *Candida*.

A0026: Bilateral Congenital Absence of Stapes Superstructure, Rare Ossicular Anomaly Managed Endoscopically

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Introduction The congenital anomalies of ossicular chain of the middle ear are an uncommon event that can present in a variety of ways. Among these malformations, the congenital absence of stapes (CAS) is a very rare condition that is seldom described in the English scientific literature. It was first reported by Mcaskile and Sullivan in 1955 in two patients with conductive hearing loss.

Case Presentation A 19-year-old male patient presented with complaints of bilateral hard of hearing since childhood, nonprogressive type. Family history was negative for any otologic or genetic problem. The audiogram showed bilateral conductive hearing loss with an average air-bone gap of 60 dB on both sides. CT temporal bone revealed the absence of stapes superstructure bilaterally, and an abnormal facial nerve location. Endoscopic exploratory tympanotomy and ossicular reconstruction were done on right side first, in the year 2017, and on left side in the year 2018 (June).

Discussion The CAS is obviously a rare entity with only 12 cases reported in the literature. In all cases, CAS present as a conductive hearing loss with normal external auditory canal and intact tympanic membrane. The exact etiology is still not known and it has been suggested that malformation or agenesis of the stapes and oval window is related to the abnormal development of the facial nerve. Various managements have been described through time. This includes a broad range of options from exploratory surgery and reconstruction prosthesis to amplification.

Conclusion Among all possible middle ear anomalies, stapes agenesis is rarely a part of the differential diagnosis for conductive hearing loss. Only 12 cases have been published in the English scientific literature (1955–2017). No cases have been published in India, till date. More than half of the patients with CAS have an abnormal facial nerve, which may complicate surgery. This patient has an anteroinferior displacement of facial nerve canal but we have done bilateral endoscopic reconstruction surgery successfully without any injury to facial nerve.

A0027: Malignant Otitis Externa: A Risky Business Anu Jacob

Introduction Malignant otitis externa or necrotizing otitis externa or skull base osteomyelitis is an invasive infection in the external auditory canal and skull base where the patient presents with excessive purulent ear discharge associated with severe ear pain with or without cranial nerve involvement. The most common cranial nerve to be involved is the facial nerve.

Case Presentation A 70-year-old diabetic man came with complaints of severe left ear pain and left ear discharge for 2 months and headache and facial deviation for 1 week. On examination, he had tenderness over the tragus and pain on pulling the auricle. External auditory canal was edematous and granulation present. Deviation of angle of mouth toward right was noted. Minimal palsy of left side of soft palate was noticed. Computed tomography showed irregular lytic destruction in the left middle ear. We managed the patient with diabetic control, and broad-spectrum antibiotics through oral, intravenous, and topical routes. Patient was symptomatically feeling better.

Discussion Toulmouche in 1838, was the first to report a case of malignant external otitis. In 1968, Chandler described an aggressive clinical behavior, poor treatment outcome, and a high-mortality rate for the patients affected by this disease. MOE is an aggressive infection in the external auditory canal. It is more common in elderly males with uncontrolled diabetes. Imaging, like computed tomography, magnetic resonance, technetium bone scanning, and radioisotope scanning, helps in confirming diagnosis and extend of spread. Treatment is aggressive medical therapy with pseudomonal coverage. Early infections may be treated with an oral fluoroquinolone (ciprofloxacin), except for resistant organisms. More advanced cases may require parenteral antibiotics with diabetes control and regular follow-up. Hyperbaric oxygen therapy has been used as an adjunct to medical therapy. Surgical debridement of nonviable sequestra of bone is also done.

Conclusion The symptoms and line of management vary with stage at which we diagnose. The earlier it is diagnosed the better the prognosis. As it is a bone eating disease of skull base, it has all the dangers involved and thus requires an aggressive and quick treatment.

A0028: Hearing Outcomes following Canal Wall down Mastoidectomies with Tympanoplasty
Architha Menon

Aim To determine the hearing status in post canal wall down mastoidectomies and comparison in hearing outcome following use of PORPs, TORPs and cartilage grafts, or a combination of all.

Objectives To measure the pure tone average values of patients' preoperatively and postoperatively and assess the improvement or decrement. To evaluate the efficacy of various materials used for reconstruction.

Materials and Methods Patients with chronic suppurative otitis media, atticofacial type in a tertiary institute between January 2013 and January 2018, who underwent canal wall down mastoidectomy with tympanoplasty. The study involved comparison of the pure tone audiogram values done as per standard care of treatment of patients who underwent canal wall down mastoidectomy. The efficacy of reconstruction material used was based on the hearing outcomes of the patient. Results were analyzed using appropriate statistical methods. Outcome measured based on the improvement or worsening of hearing parameters following surgery as per the audiogram values.

Result Hearing improvement was noted in significant percentage following canal wall down mastoidectomy. Further details shall be discussed during the presentation.

A0029: Comparison of Microscopic and Endoscopic Myringotomy With or without Grommet
Ashish G. Rao

Aims Otitis media with effusion (OME) is a common middle ear condition in younger age group and if medical line of treatment fails, it is treated surgically by myringotomy which is usually done under microscope. As the use of endoscope in ear surgeries has increased in the past decade, we thought of doing myringotomy under endoscope and comparing its advantages and disadvantages over conventional microscopic procedure.

Materials and Methods Design: A time-bound descriptive nonrandomized study. Setting: tertiary care hospital. Patients: 33 children of age group 3 to 13 years suffering with OME, who failed medical treatment were included in the study. Methods: 18 underwent myringotomy \pm grommet insertion under microscope, and remaining 15 underwent endoscopic procedure.

Results The primary outcome observed was time taken for the procedure which was more in conventional microscope group than that in endoscopic group. Additional observations like visualization of entire tympanic membrane without adjusting patients head and satisfactory clarity of view and depth perception were found to be better in endoscopic group.

Conclusion Less operative time, satisfactory depth perception, satisfactory clarity of field, and visualization of entire tympanic membrane without turning patient's head make myringotomy \pm grommet insertion with endoscope a better alternative than with a conventional procedure.

Keywords otitis media with effusion, myringotomy, microscope endoscope

A0030: Mapping of Pediatric Cochlear Implant Using Neural Response Threshold and Behavioral Observation Audiometry

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Aim To measure the correlation between neural/auditory response threshold (NRT/ART) and most comfortable level for behavioral (MCLB), whichever is better for rehabilitation purpose and to calculate the impedance.

Materials and Methods Mapping may be done by various methods. We performed neural/auditory response threshold (NRT/ART) and behavioral observation audiometry (BOA). NRT/ART is the technique by which we measure the response from the auditory nerve using the hi-resolution bionic ear system. Neural response measurement depends on the neural tissue, stimulus used, and recording technique. BOA is used for observing motor response on presenting sound to the implanted child. Most comfortable level for behavioral