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**ID: IP217****Comparison between different donor sites of grafts to tympanoplasty**Presenting Author: **Chang-Yu Tsai**Chang-Yu Tsai, Chin-Kuo Chen, Wu-Po Chao  
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*Learning Objectives:* To review the literatures, it is still a controversy about different materials to take rate in tympanoplasty. This study aims to investigate the anatomical and outcomes of Transcanal Endoscopic tympanoplasty with different donor sites of grafts.

*Objective:* To review the literatures, it is still a controversy about different materials to take rate in tympanoplasty. This study aims to investigate the anatomical and outcomes of Transcanal Endoscopic tympanoplasty with different donor sites of grafts.

*Materials and Methods:* We retrospectively reviewed the charts of patients who underwent Transcanal Endoscopic tympanoplasty with different donor sites of grafts at the Chang Gung Memorial Hospital. All calculations were performed with a commercial statistical software package (SPSS 12.0 for windows)

*Results:* As a result, the take rate of transcanal endoscopic tympanoplasty and audiological outcomes was not related to different donor site. We will present our further outcome and discussion on the future conference.

*Conclusion:* In our study, there is no significant difference in the take rate of transcanal endoscopic tympanoplasty and various dorsal grafts. The results conclude the outcome of tympanoplasty with Transcanal Endoscopic Ear Surgery is similar as conventional microscopic technique.

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**ID: IP218****Mastoidectomy reconstruction with Sofradex®/bone pâté: is there a hearing effect?**Presenting Author: **Nitesh Patel**Jagdeep Virk<sup>1</sup>, Nitesh Patel<sup>2</sup><sup>1</sup>Whipps Cross Hospital, Barts Health, <sup>2</sup>Whipps Cross Hospital

*Learning Objectives:*

*Background:* The primary goal of cholesteatoma surgery is complete eradication of the disease and to produce a dry, healthy ear. A mastoid cavity following canal wall down

surgery can result in major morbidity due to chronic otorrhea and infection, difficulty with hearing aids, and vertigo with temperature changes, particularly when concomitant meatoplasty is performed. Mastoid obliteration with reconstruction of the bony external ear recreates normal anatomy to avoid such morbidity (and obviates the need for soft tissue meatoplasty). Bone pâté reconstruction is one of the surgical options but some controversy persists in its admixture with Sofradex®, with suggestions that this may induce a sensorineural hearing loss.

*Aim:* To examine the curative and hearing effect of the use of Sofradex®/autologous bone pâté for posterior canal wall and attic reconstruction following mastoidectomy in consecutive patients.

*Method:* Retrospective case series; autologous bone pâté was used in conjunction with Sofradex® in all cases.

*Results:* 28 patients were identified. Mean preoperative and postoperative bone conduction thresholds were 15.5 and 18.3 dB respectively (paired t test, p = 0.12, non-significant). Mean preoperative and postoperative air conduction thresholds were 44.6 and 44.8 dB respectively. Follow up ranged from 6–36 months, with a median of 12 months. All patients had a dry, healthy ear at long term follow up. There have been no cases of recurrent or residual cholesteatoma thus far.

*Conclusion:* Mastoid and epitympanic obliteration with autologous bone pâté and Sofradex® is a safe and effective technique. There is no current evidence that demonstrates sensorineural hearing loss with the concomitant use of Sofradex®.

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**ID: IP219****Relationship of Tympanogram Width (Tw) with Adenoid Hypertrophy: Predictor of Otitis Media with Effusion Occurrence in Adenoid Hypertrophy**Presenting Author: **Ahmad Dian Wahyudiono**Ahmad Dian Wahyudiono<sup>1</sup>, Andrew Halim<sup>2</sup><sup>1</sup>Faculty Medicine of Brawijaya University,<sup>2</sup>Department of Otorhinolaryngology-Head and Neck surgery Faculty Medicine of Brawijaya University

*Learning Objectives:*

*Abstract:* Otitis media with effusion (OME) is difficult to detect because the symptoms and signs are not typical or even asymptomatic. Adenoid hypertrophy is an important cause of OME in children. There are many researches about relationship of adenoid hypertrophy and OME in children. *Tympanogram width* (Tw) has been known to be a sensitive parameter for diagnosis of OME.

**Purpose:** To understand the relationship of Tw and adenoid hypertrophy.

**Method:** This is an observational analytic study involving subjects with adenoid hypertrophy without OME who had undergone adenoid skull lateral X-Ray, nasoendoscopy, and tympanometry. Relationship of tympanometry parameters (Gr, Tw, Ytm, TPP, and Jerger type) with degree of adenoid hypertrophy measured with adenoid skull lateral X-Ray and nasoendoscopy was analyzed with Pearson and Spearman correlation test.

**Result:** There was significant correlation ( $p > 0,01$ ) between Tw and degree of adenoid hypertrophy according to 3 adenoid skull lateral X-Ray measuring methods. There was no significant correlation between Ytm and Gr with degree of adenoid hypertrophy according to 3 adenoid skull lateral X-Ray measuring methods. There was also significant correlation ( $p > 0,05$ ) between Tw and degree of adenoid hypertrophy measured with nasoendoscopy according to Parikh. There was no significant correlation between Gr, Ytm, TPP, and Jerger type with degree of adenoid hypertrophy measured with nasoendoscopy according to Parikh.

**Conclusion:** Tympanogram width correlates significantly with adenoid hypertrophy and has the potential to predict occurrence of OME.

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## ID: IP220

### Diagnostic algorithm for patients presenting with tinnitus

Presenting Author: **Hussein Walijee**

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#### Learning Objectives:

Tinnitus is a common and potentially debilitating global health problem. Rarely, it may be the presenting symptom of a serious underlying condition such as vestibular schwannoma, thereby necessitating a thorough assessment. Causes of tinnitus are described and divided into two main categories: subjective (heard by the patient only) and objective (heard by the examiner also). History and examination is key to differentiating between aetiologies however in many cases there is no identifiable underlying cause. The authors provide an approach to tinnitus by means of a diagnostic algorithm. Management in primary care is discussed as well as Department of Health guidance on when patients are to be referred to secondary care.

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## ID: IP221

### Long-term hearing results following retrograde tympanomastoidectomy with canal reconstruction by using mastoid isolation/obliteration

Presenting Author: **Chih-Hung Wang**

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#### Learning Objectives:

**Introduction:** Besides mastoid obliteration as enrolled in this study, we offered another surgical technique—mastoid isolation by using several pieces of bony plates and bone chips placed on the preserved canal wall and tegmen tympani to complete the reconstruction of the EAC defect in a one-stage surgical procedure.

**Methods:** A total of 99 patients resulted in 102 ears underwent retrograde tympanomastoidectomy in a single stage procedure, 6 of them underwent two-stage ossiculoplasty. The main outcome measures included surgical procedures of reconstruction, types of tympanoplasty, complications, and hearing outcomes.

**Results:** In  $>71\%$  of ears, the audiometric tests were monitored more than 2 years. The results of hearing assessments indicated a significant improvement in hearing gain after surgery in view of the postoperative change of air-conduction (AC) thresholds and air-bone gaps (ABGs) ( $p < 0.001$ ). Linear regression analysis of pure-tone average (PTA) before and after surgery at different frequency showed patients benefit postoperative hearing gain largely at low and middle frequencies but may deteriorate their hearing at frequency of 8000 Hz. Among 72 cases with non-serviceable hearing preoperatively, 25 of them (34.7%) would achieve serviceable hearing outcomes postoperatively ( $p < 0.001$ ). The postoperative improvement of hearing degree for patients with moderate, severe or profound hearing loss showed statistically significant difference ( $p = 0.04$ ). Tympanoplasty of type III-i increased the hearing gain markedly, followed by type III-c, I, and IV-c. Two-stage ossiculoplasty can provide a better air gain at 500, 1000, and 2000 Hz. The overall rate of complication was 8.8% (9 of 102).

**Conclusions:** We conclude that reconstruction of the EAC and mastoid via mastoid isolation/obliteration using bone chips/paté can be considered as an alternative procedure following retrograde tympanomastoidectomy. It gives excellent surgical results and has fewer complications.

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## ID: IP222

### Advanced stage of cholesteatoma presenting to medical services in Cambodia

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