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Learning Objectives:

Purpose: There are specific frequency hearing losses such as c4-dip(2kHz loss) in otosclerosis and c5-dip(4kHz loss) in case of noise induced hearing loss. The c3-dip(1kHz loss), however, is seldom mentioned in clinical field. We found a group of patient with 1 kHz hearing loss fortuitously and report it with review of literature.

Method: Tertiary academic referral center-based retrospective chart review and review of audiogram was done. Otologic history, audiogram, diagnosis, occupation, history of noise exposure were reviewed with chart and telephone interview. We compared the c3-dip group with 98 patients of c5-dip group(4kHz hearing loss group).

Results: Thirty one patients met the criteria of 1kHz audiometric notch. There are eleven males and 20 female with mean age of 40.6 years old. The pure tone threshold of 1kHz was 37.97 dB and the hearing threshold was 22.38 dB with other frequencies. Tinnitus was most the common complaints of c3-dip group compared with c5-dip group. The most common diagnoses of the c3-dip group were sudden sensorineural hearing loss(n = 8) and idiopathic tinnitus(n = 8). Female patients and unilateral cases were more common in c3-dip group than c5-dip group. Ear fullness was the more common symptom in c3-dip group than c5-dip group. The duration of occupation-related noise exposure was longer in c5-dip group than c3-dip group. The history of head or ear trauma was more frequent in c3-dip group than c5-dip group.

Conclusion: We defined a new clinical entity of 1 kHz hearing loss group as c3-dip group.

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ID: IP083

Perilymph Gush during the Stapedotomy for a Suspicious Osteogenesis Imperfecta Conductive Hearing Loss

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Learning Objectives:

A 38-year-old woman visited our clinic with her left progressive hearing loss for 2 months. She had characteristic blue sclera and experienced frequent fractures from minor trauma in her teens. She looked normal in her appearance and stature. She did not have family history of hearing loss. Her ear drum was clear and pure tone audiogram showed left side 40 dB air-bone gap conductive hearing loss. Her right hearing was normal. Temporal bone CT revealed nothing special. Exploratory tympanotomy was performed to find stapes fixation and decided to do the stapedotomy. However, profuse perilymph gush developed when

performing the foot plate. Piston wire prosthesis was placed with struggling effort. Lumbar drain was placed right after finishing the operation. Although she had immediate post-operative dizziness, hearing loss, and tinnitus for 3 days, her hearing gradually improved and air-bone gap was closed 2 months after the surgery. Her good hearing was maintained for the 6 months on the follow-up audiogram.

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Operative Management of External Auditory Canal Cholesteatoma

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Learning Objectives:

We present our experience of Ten cases of EAC cholesteatoma treated in a UK district general hospital (serving a population of approximately 275,000) between 2007 and 2014. We discuss the clinical presentation, appropriate investigation, and subsequent surgical management of these cases. Cholesteatoma of the external auditory canal is rare, but has potential for serious complications such as erosion into the temporo-mandibular joint, facial nerve, and skull base. The most common presenting symptoms were unilateral otorrhoea and otalgia. Clinical findings included erosion of the inferior aspect of the bony canal wall, with accumulated keratin and bony sequestrum. Computed Tomography confirmed the presence of bony canal wall erosion, with an overlying soft-tissue attenuation mass in most cases. The middle ear was normal in most of cases. Examination under anaesthesia and biopsy of the EAC lesion was used to differentiate between EAC cholesteatoma, necrotising otitis externa, and squamous cell carcinoma of the EAC skin. Histological analysis of biopsy specimens showed keratin, with no evidence of malignancy. In each case, the disease was at a relatively advanced stage with erosion of the petrous temporal bone. Bony canal-meatoplasty was done via a post-auricular approach. The cholesteatoma was excised, and the resulting cavity was filled with grafted tragal cartilage and perichondrium or temporalis fascia to achieve a smooth, self-cleaning ear canal.

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Is There Hearing Loss In Sjogren's Syndrome? A Cohort Matched Cross-sectional Observational study

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