

Nasopharynx. Second being Canal skin and Tympanic membrane epithelium which exfoliates epithelium and is exteriorised. After surgery if this natural cavities loose their anatomy, operated cavity will no longer be dry or healthy in long term.

After complete canal down mastoidectomy two types of mastoid cavities can be found - First -completely sclerosed – means there remains no visible mastoid cells at the floor-here a large and thin fascia is lined to cover all the cavity and it epithelises and Second - cellular cavity (it is always not possible to exenterate all the air cells or at least impractical) – in which after complete Mastoidectomy, there still remain some cells at the floor. If this cavity is lined by fascia or cavity filling is done, the remaining air cells will keep on secreting mucus and granulate and the cavity will no longer be dry. A new method of solving this problem is - Conchal cartilage which is harvested at the time of meatoplasty is thinned out and laid down in cavity with convexity upwards so that it creates a small cavity communicating to aditus and then to middle ear and large fascia is lined over it.

Out of 102 canal down mastoidectomies we found primary healed cavity in 64 which never had cavity problem, 33 cavities were showing minor granulations and were cured with Trichloroacetic acid,steroid packing or drops.3 came to be tubercular and 3 never became dry in 15 months follow up.

The benefit of this procedure is that the cartilage needed is already harvested by meatoplasty, time saving as no cartilage fixation is needed to create a separate wall, time saving, reduces the size of cavity, primary healing occurs as full cavity is lined by fascia and no raw bone is exposed.

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Vestibular schwannoma growth after stereotactic radiosurgery

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Learning Objectives: 1) To clarify the natural history of vestibular schwannoma and outline treatment options 2) To present two cases of abnormal vestibular schwannoma growth following STRS 3) To discuss potential reasons for tumour growth after STRS 4) To confirm the need for life-long radiological and clinical surveillance following STRS.

Introduction: Vestibular schwannomas, are benign tumours of Schwann cell origin that occur on the eighth cranial nerve. Commonly presenting symptoms include hearing loss, tinnitus and balance disturbance. Tumour progression can lead to brainstem compression, cranial neuropathies and hydrocephalus. Smaller, slow-growing tumours can be safely observed, but larger tumours necessitate treatment in the form of either surgery or STRS. The literature states that tumours up to 3 ;cm in diameter can be successfully controlled in the majority of patients with STRS, and a recent Cochrane review concludes that the treatment method for large vestibular schwannomas should be chosen on an

individual basis, taking into consideration the patient's preferences, clinician experience and the availability of radiotherapeutic equipment.

Methods: We present two cases of vestibular schwannoma which were treated with STRS, and decreased in size during the two years following treatment, following which they began to exhibit further growth.

Discussion: Pseudoprogression of vestibular schwannomas for up to two years following STRS is a well-documented phenomenon, following which the oedematous tumour regresses in response to the STRS.

Potential reasons for tumour growth over two years after STRS are malignant transformation of the tumour, and late failure of STRS. Although rare, there is a documented risk of malignant change following exposure to radiation. Late failure of STRS is possible if, despite an early response to STRS, living cells within the tumour develop an adequate blood supply for growth.

Conclusions: Vestibular schwannoma patients warrant life-long radiological and clinical surveillance following STRS, as there is a small chance of initial regression followed by further growth. These cases therefore require surgery, for tumour removal and histological diagnosis.

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Management of the intact, mobile stapes: a 12 year experience

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Learning Objectives: 1) To clarify the goals of tympanomastoid surgery 2) To present a single surgeon's 12 year cohort of patients 3) To determine hearing outcomes in patients with an isolated, intact, mobile stapes and aerated tympanum following tympanomastoid surgery 4) To compare the outcomes of Type III cartilage tympanoplasty with published results of various ossicular prostheses in similar patient groups. 5) To recommend management guidelines for hearing preservation in patients with an isolated, intact, mobile stapes

Introduction: The goals of tympanomastoid surgery are the elimination of disease and the preservation of good hearing function. There is much literature on this topic, and it is understood that a mobile stapes and aerated tympanum are essential for a successful type III tympanoplasty, and that the interposition of a cartilage disc between stapes and tympanic membrane graft can improve audiometric results. However, there is heterogeneity amongst reported case series, and conflicting reports regarding the use of ossiculoplasty materials. The aims of this paper were to analyse hearing outcomes from a 12 year cohort of patients with an isolated, intact, mobile stapes following tympanomastoid surgery; to compare primary cartilage reconstruction with

no primary reconstruction, and to compare the outcomes of Type III cartilage tympanoplasty with published results of other reconstruction methods.

Methods: The records of 160 patients from a single surgeon's 12-year cohort were retrospectively analysed. Postoperative changes in air conduction thresholds (0.5, 1, 2 and 4kHz and average gains) and air-bone gap were calculated for each operated ear 2 years after surgery according to AAO-HHS guidelines. Revision surgery and other complications were documented.

Results: Audiometric and other outcomes are presented in detail

Conclusions:

1. The vast majority of patients in whom primary reconstruction was not performed did not require further surgery, as the development of a natural Type III tympanoplasty preserved or improved hearing thresholds following primary disease elimination.
2. Type III cartilage tympanoplasty is an effective technique for hearing improvement in patients with an intact, mobile stapes. Results are similar to those obtained with partial ossicular replacement prosthesis and autologous bone ossiculoplasty, and have the added benefits of lower cost and a lower complication rate.
3. Our recommendations for management of isolated stapes are based on these results.

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Otological aspects of undergraduate otolaryngology education in the United Kingdom

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Learning Objectives:

Introduction: Studies show that not all UK medical schools have a formal otolaryngology attachment, that the time dedicated to teaching in those which do is comparatively small and that qualified doctors feel that their training was inadequate.

Avoiding curriculum overload is a challenge in the ever expanding field of medicine. It would therefore be advantageous to identify and include key aspects of a subject within a curriculum. Here we report the otological findings from a national curriculum development project.

Methods: A longitudinal transformation approach to mixed methods research was utilised. The undergraduate curricula from UK medical schools were evaluated. Results from this comparison were used to devise a questionnaire. This was

distributed nationally via email to establish what doctors felt a newly qualified doctor should know about otolaryngology.

Results: A curriculum comparison of 19 medical schools revealed a high degree of variability between undergraduate otolaryngology curricula.

308 survey responses were received. Doctors felt that graduates should be able to perform otoscopy (93%) and tuning fork tests (78%). Respondents indicated that graduates should understand indications for common audiological investigations but not to interpret the results.

Respondents felt graduates should be able to assess a patient with chronic otitis media. Results indicate graduates should know more about conditions which present acutely.

Doctors felt that graduates should understand indications for otological procedures but few felt that they should have observed these. Respondents also felt that it was important for graduates to learn about the implications of hearing loss and communication with hearing impaired individuals.

Conclusions: This method of curriculum development allows the end users, the doctor, to influence the content of the curriculum. The study shows the variability in otolaryngology teaching in the UK and highlights key areas for student learning.

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The effects of saccular endolymphatic hydrops on hearing

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Learning Objectives:

Introduction: Patients with significant endolymphatic hydrops (EH) sometimes show a connection between the footplate and the dilated saccule. It was supposed that this connection might cause the low-frequency air-bone gap in Menière's disease. The purpose of this study was to investigate the effects of significant EH showing a footplate-saccule connection on hearing, particularly for low-frequency air-bone gaps.

Methods: Evaluations were conducted using 1996 ears, evaluated by 3-T MRI performed 4 h after intravenous injection of Gd. The degree of EH in the vestibule and cochlea was classified into three grades: none; mild; or significant. Findings of the connection were checked. Ninety-one ears showed the connection. After elimination of ears with middle or inner ear abnormalities and severe hearing loss, 60 ears with the connection were evaluated. We selected those patients who had one ear with the connection and the other with significant EH of the vestibule and/or cochlea