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Abstract Selection

Cisplatin and radiotherapy in the treatment of locally advanced head and neck cancer—a review of their cooperation. L. Marcu, T. van-Doorn, I. Olver. Department of Physics and Mathematical Physics, University of Adelaide, Royal Adelaide Hospital, Australia. Imarcu@mail.rah.sa.gov.au. *Acta oncologica* (2003), Vol. 42 (4), pp. 315–25.

A review of the published literature has been undertaken to ascertain the trends in treatment schedules of unresectable head and neck cancer (HNC) using cisplain in conjunction with raditotherapy. In addition, four trials were reviewed where cisplain was examined as a single agent without radiotherapy, demonstrating that cisplatin alone has a palliative effect only, and for a curative intent should be used in combination with radiation. Of the numerous clinical trials published on such combined chemo-radiotherapy, 16 were selected for analysis fulfilling the following criteria: cisplain used as the sole chemotherapeutic agent in combination with radiation for patients with unresectable squamous cell carcinomas of the head and neck, with no previous treatment for the same malignancy. Daily low-dose cisplatin performed in 6 out of the 16 trials demonstrated increased tumour control with less toxicity as compared to weekly high-dose drug delivery. The increased tumour control with a daily low-dose schedule reflects the observation that cisplatin dissociates from the DNA in 24 h. Other cisplatin properties (e.g. radiosensitizing) also have the potential to influence chemoradiotherapy treatment outcomes. There is significant scope to further optimize the treatment schedule for the unresectable HNC through detailed study of the pharmacokinetics and radiobiology of combined chemo-radiotherapy.

A head and neck cancer patient dies! Why perform an autopsy: for the relatives, for the clinicians or for the pathologists? P. J. Bradley, A. Ferlito, J. Lowe, K. O. Davaney, W. I. Wei, A. Rinaldo. Department of Otorhinolaryngology–Head and Neck Surgery, Queens Medical Centre, Nottingham, UK. *Acta oto-laryngologica* (2003) April, Vol. 123 (3), pp. 348–54.

It is no secret that autopsy rates at most hospitals worldwide—both teaching and community hospitals—have declined precipitously in recent decades, but is this a desirable state of affairs? This article explores this issue from three viewpoints: that of the family members who grant permission for autopsies; that of the clinicians who seek permission for the autopsy to be carried out; and that of the pathologists who actually perform the post-mortem examination. Family concerns about (the sometimes tangential) matter of organ retention following autopsy have recently been highlighted in Europe, with an accompanying negative overall impression of the autopsy being conveyed by many outlets of the popular media. Clinicians will often conceded that they feel somewhat distanced from the whole process of autopsy, and so do not hold it in such high esteem as their predecessors once did decades ago. Pathologists at present often perform autopsies as ''additional duties'' to be fitted in around their central functions, and so do not see them as a primary task to be accomplished. However, there are reasons why this may be detrimental to patient care, including in particular the fact that clinical/radiographic diagnoses are sometimes not confirmed by the results of a complete autopsy. Suggestions for improving the autopsy rate—in particular amongst head and neck cancer patients—are discussed, and include performance of a more rapid limited autopsy and the designation of specialist pathologists in head and neck cancer to carry autopsies of these patients as an extension of their clinical duties. One conclusion seems inescapable: to increase autopsy rates, the status of the procedure will necessarily have to be upgraded from that of ''afterthought/perfunctory task'' to that of ''consultation'', with all of the shifts in attitude such a modification would entail.

Detection of human papillomavirus in temporal bone inverted papilloma by polymerase chain reaction. G. Marioni, G. Altavilla, G. Busatto, S. Blandamura, C. F. De, A. Staffieri. Department of Otolaryngology, Head and Neck Surgery, University of Padua, Padua, Italy. g_marioni@virgilio.it. *Acta Oto-laryngologica* (2003) April, Vol. 123 (3), pp. 367–71.

There is debate about the role of human papillomavirus in the induction of rare inverted papillomas involving the temporal bone and in the higher recurrence rates and association with squamous cell carcinoma of temporal bone inverted papillomas compared with sinonasal inverted papillomas. An exhaustive review of the literature revealed that eight cases of temporal bone inverted papilloma have been analysed for human papillomavirus. None of the cases studied with *in situ* hybridization proved positive. Only one case was found to be positive using the more sensitive polymerase chain reaction assay. We present the first two cases of Schneiderian-type papilloma involving the temporal bone to be analysed by type-specific polymerase chain reaction methods for human papillomavirus.

Chromosome 8 aneuploidy in acquired cholesteatoma. S. M. Yildirim, K. Ozturk, H. Acar, H. Arbag, C. H. Ulku. Department of Genetics, Faculty of Medicine, Selcuk University, Konya, Turkey. mselman@dostmail.com. *Acta Oto-laryngologica* (2003) April, Vol. 123 (3), pp. 372–6.

OBJECTIVE: To investigate the incidence of chromosome 8 aneuploidy in acquired cheolesteatoma. MATERIAL AND METHOD: Cholesteatoma tissue and postauricular skin as a control were surgically obtained from 12 patients with acquired cholesteatoma. Fluorescence *in situ* hybridization (FISH) analysis using a chromosome 8-specific alpha-satellite DNA probe was performed on the interphase nuclei. Two hundred cell were analyzed for each of the samples. RESULTS: Chromosome 8 aneuploidy was found in 9/12 patients whereas a normal cell structure with 2 signals was observed in the remaining 3 patients. In samples with chromosome 8 aneuploidy, the mean proportion of aneuploidy was 25.6%, including monosomy (3.2%), trisomy (16.1%), tetrasomy (4.9%) and more than tetrasomy (1.4%). The number of aneuploid cells in recurrent cases was more than that in non-recurrent cases. CONCLUSION: A numerical aberration of chromosome 8 was found in patients with acquired cholesteatoma. Our results support the hypothesis that chromosome 8 may be a prognostic factor for cholesteatoma and an indicator in the follow-up of patients with cholesteatoma.

Prediction of progression from atypical to definite Ménière's disease using electrocochleography and glycerol and furosemide tests. H. Kimura, S. Aso, Y. Watanabe. Department of Otolaryngology, Faculty of Medicine, Toyama Medical and Pharmaceutical University, Toyama City, Japan. chavez@ms.toyama-mpu.ac.jp. *Acta Otolaryngologica* (2003) April, Vol. 123 (3), pp. 388–95.

To investigate whether electrocochleography (ECochG) and glycerol and furosemide tests could predict progression from atypical to definite Ménière's disease (MD). MATERIAL AND METHODS: ECochG and glycerol and furosemide tests were performed in 1569 patients with various cochleovesticular diseases, including definite MD, atypical MD, syphilitic labyrinthitis, delayed endoclymphatic hydrops, sudden hearing loss, cochleovestibulopathy and sensorineural hearing loss. Patients with atypical MD were divided into five categories based on their symptoms. RESULTS: A total of 115/118 patients (97%) with definite MD who underwent all 3 tests showed a postive result in at least 1 test. Ninety-nine patients who did not satisfy the diagnostic criteria of definite MD but had vertigo and/or hearing loss at the first visit subsequently progressed to definite MD. It was retrospectively found that 92% of patients showed at least 1 positive finding in these 3 tests at the initial stage. In those patients who showed a negative test result in either ECochG or the glycerol test, the

possibility of progression to definite MD was low. CONCLUSION: The combination of ECochG and the glycerol and furosemide tests was helpful in diagnosing endolymphatic hydrops (ELH). ECochG and the glycerol test were effective tools for predicting the progression to definite MD in patients with atypical MD, sudden hearing loss and other cochleovestibular diseases. Our test results also indicated that the pathological state of atypical MD included both non-ELH and ELH.

Hyaluronan and alpha-atrial natriuretic polypeptide in human nasal polyps: contributing factors to oedema formation and poly growth? C. Laurent, Y. J. Yoon, I. Hvidsten, S. Hellstroem. Department of Otorhinolaryngology, University Hospital, University of Umeaa, Umeaa, Sweden. claude.laurent@ent.umu.se. *Acta Oto-laryngologica* (2003) April, Vol. 123 (3), pp. 406–12.
OBJECTIVES: To identify and localize hyaluronan (HYA) and alpha-atrial natriuretic polypeptide (ANP) in human nasal polyps and to measure the HYA concentrations. MATERIALS AND METHODS: Twelve nasal polyps were collected during routine polypectomies and processed histochemically and biochemically to determine the occurrence of HYA. The distribution of ANP was investigated using an immunocytochemical method. RESULTS: HYA was unevenly distributed, being found abundantly in the surface epithelium and basement membrane and around fibres and vessels in the lamina propria. It was also present around seromucinous glands and in the secretion of cysts in the stroma. The HYA concentration was 1,000-fold higher than in serum. ANP was abundant in the apical part of ciliated surface epithelial cells and extracellularly in the basement membrane. In the stroma, ANP was confined to apical acinar cells of the seromucinous glands. CONCLUSIONS: Osmotically active HYA and numerous ANP-immunoreactive cells, active in fluid and/or ion transport functions, are present in human nasal polyps. These substances may well be involved in oedema formation and the successive growth of nasal polyps. The high concentrations of HYA in nasal polys may be of clinical significance for the future development of a local enzyme treatment for nasal polyposis.

Steroid injection for Reinke's edema using fiberoptic laryngeal surgery. I. Tateya, K. Omori, H. Kojima, S. Hirano, K. I. Kaneko, I. Juichi. Department of Otolaryngology–Head and Neck Surgery, Graduate School of Medicine, Kyoto University, Kyoto, Japan. *Acta Oto-laryngologica* (2003) April, Vol. 123 (3), pp. 417–20.
OBJECTIVE: Since 1990, we have performed steroid injections into the vocal fold under topical anesthesia using fibreoptic laryngeal surgery (FLS) in an outpatient clinic. The aim of this study was to retrospectively assess the usefulness of this treatment method in 44 patients with mild Reinke's edema. MATERIAL AND METHODS: Using fiberoptic monitoring of the larynx, a curved injection needle was inserted via the oral cavity and triamcinolone acetonide was injected into Reinke's space of the bilateral vocal fold. RESULTS: Remission or improvement was observed in almost all patients in terms of both patients' self-rating of hoarseness and endoscopic vocal fold findings. The maximum phonation time was a mean of 9.0 s before operation and 11.4 safter operation, and this increase was significant (p 0.01). Voice pitch also improved, from 168 to 181 Hz, in female patients, and this increase was also significant (p 0.05). CONCLUSION: Steroid injection is considered to be useful for treating mild Reinke's edema.

Familial lateral semicircular canal malformation with external and middle ear abnormalities. T. Matsunaga, E. Hirota. Department of Otolaryngology, National Tokyo Medical Center, Tokyo, Japan. tmatsunaga@ntmc.hosp.go.jp. *American Journal of Medical Genetics* (2003) February 1, Vol. 116A (4), pp. 360–7.
We report a family with inner ear lateral semicircular canal (LSC) malformation and external and middle ear abnormalities. The family had no history of known syndromes or toxic exposures. Distinct phenotypic manifestations were found in three family members. A young girl exhibited bilteral LSC malformation with a right-sided preauricular tag, a mildly deformed auricle, a stenotic external auditory canal, and a constricted middle ear cavity. She had moderate conductive hearing loss in the right ear but normal hearing in the left ear. Her younger brother exhibited right-sided LSC malformation, microtia, external auditory canal atresia, a malformed middle ear cavity, and abnormal auditory ossicles. He had severe mixed hearing loss in his right ear. Their mother exhibited left-sided LSC malformation without external and middle ear abnormalities, and the hearing was normal in her left ear. None of the three cases had vestibular symptoms, and their results of balance tests were appropriate for the corresponding ages. In contrast, significantly decreased LSC function was revealed by caloric tests in an ear with LSC malformation. Previously, LSC malformation may have been underdiagnosed in patients presenting with external and middle ear abnormalities and their relatives, since this malformation is frequently associated with normal hearing and balance or conductive hearing loww only. To our knowledge, this condition has not been described previously. This condition supports a genetic basis for the combination of LSC malformation and external and middle ear abnormalities and may represent an autosomal dominant condition with variable expressivity.

Orthopaedic theatre noise: a potential hazard to patients. M. R. Nott, P. D. B. West. Royal West Sussex Hospital, St Richard's, Chichester, PO19 4SE, UK. michael.nott@rws-tr.nhs.uk. *Anaesthesia* (2003) August, Vol. 58 (8), pp. 784–7.
Potentially hazardous noise levels are generated in the course of major orthopaedic surgery. The risk to staff is probably real but very small. We used a sound level meter to record maximum and mean levels and found peak values which exceeded 100 dB(A). If sustained, there is a possibility of significant inner ear damage and perhaps permanent troublesome tinnitus, especially among elderly and already hearing-impaired patients. This could be eliminated by the use of ear defenders or disposable earplugs.

Serious Consequences of a Sore Throat. M. G. Clarke, N. J. Kennedy, K. Kennedy. Department of Intensive Care, Tautnon Somerset Hospital, Taunton, Somerset, UK. *Annals of the Royal College of Surgeons of England* (2003) July, Vol. 85 (4), pp. 242–4.
Lemierre's syndrome, caused by Fusobacterium necrophorum, is a potentially fatal sequelae of a sore throat characterised by septicaemia, internal jugular vein thrombophlebitis and metastatic abscesses. The Chief Medical Officer reported in February 2001 that the incidence is increasing. Two cases seen in one year, with different presentations, are reported. The first patient presented with sepsis, jaundice, hepatic abscesses and portal vein/superior mesenteric vein thrombosis, whilst the second presented with sepsis, sore throat and internal jugular vein thrombophlebitis. Both patients were treated with antibiotics and anticoagulants with a favourable outcome.

The organisation of head and neck oncology services in the UK: The Royal College of Surgeons of England and British Association of Head and Neck Oncologists' preliminary multidisciplinary head and neck oncology audit. M. Birchall, P. M. Brown, J. Browne. Chairman BAHNO Audit Committee, Clinical effectiveness Unit, The Royal College of Surgeons of England, UK. martin.birchall@bristol.ac.uk. *Annals of the Royal College of Surgeons of England* (2003) May, Vol. 85 (3), pp. 154–7.
This study was a collaboration between The Royal College of Surgeons of England Clinical Effectiveness Unit and the British Association of Head and Neck Oncologists (BAHNO). We created a multidisciplinary database through an enquiry to all 49 UK radiotherapy centres. A questionnaire audit identified teams and individual in the UK involved with treatment of head and neck cancer. A questionnaire on their organisation, and intentions for change was sent to the 108 teams (90 per cent response) and 11 sole practitioners (45 per cent response) identified. Overall, 335 surgical consultants were involved in the treatment of 7500 cases per annum, with large variations in size of catchment populations served by teams. Mean length of time spent with each out-patient was 11 min. Of respondents, 58 per cent were already using the BAHNO basic dataset and more indicated intention to use it, but only 32 per cent could actually deliver information on their workload. More computerisation of data collection is essential, and national audit may bridge the data gap.

Cochlear implantation for progressive hearing loss.R. F. Gray, S. E. M. Jone, I. Court. The East Anglican Cochlear Implant Programme, Addenbrooke's Hospital, Cambridge, UK. pauline.sparks@addenbrookes.nhs.uk. *Archives of disease in childhood* (2003) August, Vol. 88 (8), pp. 708–11.
The concept of neural plasticity and the early natural abilities of hearing children to acquire speech and language without instruc-

tion have led many authorities to advocate cochlear implantation before the age of 5 years in congenital deafness. Older children therefore become lower priority for scarce public funds because they are perceived to have passed the ''window of opportunity'' to learn speech, even if hearing is restored, and continue to rely on sign language. This paper shows that a subgroup of congenitally deaf children exists, who, having made good progress with conventional hearing aids, suffer a sudden or progressive hearing deterioration which arrests the speech development. Sixty children have been implanted in the Cambridge Programme, half for meningitis or other acquired losses and half for congenital prelingual deafness. Six of this latter group were congenital but progressive; their progress, deterioration, and improvement after implantation are summarised.

Effect of amoxicillin-clavulanate in clinically diagnosed acute rhinosinusitis; a placebo-controlled, double-blind, randomized trial in general practice. C. H. Bucher, P. Tschudi, J. Young, P. Periat, A. L. Welge, H. Zuest, C. Schindler. Basel Institute for Clinical Epidemiology, Medizinische Universitaets-Poliklinik, and Universitaetsklinik fuer Hals-, Nasen-und Ohrenkrankheiten, Kantonsspital Basel, Basel, Switzerland. hbucher@uhbs.ch. *Archives of internal medicine* (2003) August 11–25, Vol. 163 (15), pp. 1793–8.
BACKGROUND: Acute rhinosinusitis is one of the most common reasons for prescribing antibiotics in primary care. However, it is not clear whether antibiotic improve the outcome for patients with clinically diagnosed acute rhinosinusitis. We evaluated the effect of a combination product of amoxicillin-potassium clavulanate on adults with acute rhinosinusitis that was clinically diagnosed in a general practice setting. METHODS: We conducted a randomized, placebo-controlled, double-blind trial with 252 adults recruited at 24 general practices and 2 outpatient clinics. Each patient had a history of purulent nasal discharge and maxillary or frontal pain for at least 48 hours. Patients were given amoxicillin, 875 mg, and clavulanic acid, 125 mg, or placebo twice daily for 6 days. Main outcome measures were time to cure (primary outcome), number of days during which rhinosinusitis restricted activities at home or work, and frequency of adverse effects (secondary outcomes). RESULTS: The adjusted hazard ratio for the effect of amoxicillin-clavulanate was 0.99 (95 per cent confidence interval (CI), 0.68–1.45) on time to cure and 1.28 (95 per cent CI, 0.80–2.05) in the prespecified subgroup of patients with a positive rhinoscopy result. At 7 days the mean difference between amoxicillin-clavulanate and placebo was −029 (95 per cent CI, −0.93 to 0.34) in the number of days with restrictions due to rhinosinusitis and −0.60 (95 per cent CI, −1.41 to 0.21) in patients with a positive rhinoscopy result, At 7 days patients who took amoxicillin-clavulanate were more likely to have diarrhea (odds ratio, 3.89; 95 per cent CI, 2.09–7.25). CONCLUSIONS: Adult patients in general practice with clinically diagnosed acute rhinosinusitis experience no advantage with antibiotic treatment with amoxicillin-calvulanate and are more likely to experience adverse effects.

Identification of 9 genes differentially expressed in head and neck squamous cell carcinoma. H. E. Gonzalez, M. Gujrati, M. Frederick, Y. Henderson, J. Arumugam, P. W. Spring, K. Mitsudo, H. W. Kim, G. L. Clayman. Department of Head and Neck Surgery, University of Texas M.D., Anderson Cancer Centre, Houston, 77030, USA. *Archives of Otolaryngology–Head and Neck Surgery* (2003) July, Vol. 129 (7), pp. 754–9.
Current treatment modalities in squamous cell carcinoma of the head and neck have failed to improve survival. Advances in the discovery of novel biomarkers and targets for therapy are necessary. DESIGN: Differential display and microarray analysis were used to identify differences in gene expression between squamous carcinoma and matched nonmalignant biopsy specimens. Differences in gene expression found *in vivo* were also tested *in vitro* by comparing primary cultured normal oral epithelium with head and neck squamous cell carcinoma (HNSCC) cell lines. Results were confirmed by relative reverse transcriptase-polymerase chain reaction and immunohistochemical analysis. RESULTS: In tumors, microarray analysis showed down-regulation of calgranulin B (CAGB), CD24, lymphoepithelial Kazal-type-related inhibitor (LEKTI), zinc finger protein (ZNF-185), transglutaminase-3 (TGM3), and the ETS homologous factor (EHF). In addition, differential display revealed down-regulation of headpin. In contrast, periostin and the human homologue of the Drosophila white gene (ABCG1) were found to be up-regulated by microarray analysis and differential display, respectively. In HNSCC cell lines, LEKTI, ZNF-185, TGM3, headpin, and ABCG1 showed an expression pattern similar to that observed in tumor specimens. Periostin showed an opposite expression pattern in cell lines compared with that of tumor specimens. No consistent pattern of expression was found for CAGB, CD24, and EHF in cell lines. Immunohistochemical analysis revealed that the expression of headpin in nonmalignant mucosa was undetectable in tumors. CONCLUSION: Using differential display and microarray analsis, we have identified and confirmed the differential expression of 9 genes in HNSCC. Work is in progress to determine the biological significance of these genes and their potential as biomarkers or targets for therapy.
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Prognostic factors and outcome for nasopharyngeal carcinoma. T. P. Farias, F. L. Dias, R. A. Lima, J. Kligerman, G. M. de-Sa, M. M. Barbosa, F. B. Goncalves, Jr. Department of Head and Neck Surgery, Hospital do Cancer I, Instituto Nacional de Cancer, Rio de Janeiro, Brazil. *Archives of Otolaryngology–Head and Neck Surgery* (2003) July, Vol. 129 (7), pp. 794–9.
BACKGROUND: Nasopharyngeal cancer (NPC) is a distinct form of cancer of the upper respiratory or digestive tract in which the epidemiologic features, origin, histopathologic types, treatment, and prognosis are different from those associated with other malignant neoplasms of this anatomical area. Recent publications have demonstrated the advantage of aggressive multimodality treatment for advanced NPC. OBJECTIVES: To evaluate the results of standardized treatment of NPC during 11 years and to identify pertinent factors for clinical outcome. METHODS: Between January 11, 1989, and December 31, 2000, 173 patients with newly diagnosed NPC were treated at Instituto Nacional de Cancer. Clinical records and radiographic studies of the patients were retrospectively reviewed. Documented data of the initial presenting symptoms, head and neck examination, radiotherapy protocols, chemotherapy regimens, and surgical technique were analyzed. To determine important prognostic factors, we correlated survival rates with age, clinical stage, tumor extent, histopathological type, and therapeutic approach. The major end point used for assessment was relapse-free survival. Survival curves were estimated by the Kaplan-Meier product-limit method. Multivariate analysis was performed using the Wilcoxon signed rank and Cox proportional hazards regression tests. RESULTS: Most patients (88.5 per cent) had locoregional advanced disease, mostly (53.4 per cent) of the nonkeratinizing subtype. Forty-seven percent of patients had clinical cervical nodal metastases at first consultation. Gross extension of the primary tumor involving the facial bones and skull base was observed in 39.3 and 20.8 per cent, respectively. Just under 75% of patients were treated with radiotherapy (median dose, 6600 cGy), and 25.4 per cent underwent concomitant chemoradiotherapy with adjuvant chemotherapy (cisplain plus 5-fluorouracil) (median dose, 6800 cGy). The 5-year disease-specific survival for the 173 patients was 32.3 per cent. The disease-specific survival for the radiotherapy group was 22.5 per cent, compared with 61.4 per cent chemoradiotherapy plus adjuvant chemotherapy group (p = 0.004). Factors associated with adverse outcomes were age older than 40 years at treatment (p = 0.001), advanced TNM stage (p =0.002), skull base invasion (p = 0.004), and facila bone invasion (p 001). CONCLUSIONS: Compared with radiotherapy with adjuvant chemotherapy improved the treatment outcome of patients with NPC treated in our institution. Advanced age, local extension, and stage of the disease adversely affected the prognosis in our patients. Compared with reirradiation, salvage brachytherapy and radical neck dissection for local and regional residual or recurrent NPC were associated with increased rates of locoregional control and survival.

The ear and its malformations: strange beliefs and misconceptions. I. E. Gamatsi, T. P. Nikolopoulos, D. E. Lioumi. Department of Plastic Surgery, Thriasion General Hospital, Athens, Greece. *British Journal of Plastic Surgery* (2003) June, Vol. 65 (4), pp. 369–74.
OBJECTIVE: To explore the strange beliefs and misconceptions related to the ear and its malformations, and how these have changed from ancient times until today. METHODS: Ancient

documents, journal articles, and history books were studied to research ancient and current beliefs and misconceptions with regard to the ear and its malformations. RESULTS: The ear has been the centre of various beliefs and misconceptions through human history. Discoveries in the area of Assyria and Babylonia have revealed that the inhabitants of these countries not only had documented various congenital dysplasias of the ear but also they believed that these malformations had prophetical meaning and implied hereditary disorders. These observations and prophecies may very well have their origin to the 4th millennium BC. Egyptian and Greek-Roman medicine had suggested strange connections of the ear with close or remote parts of the human body and similar beliefs can be found through the later centuries. Hebrew and Greek_Byzantine conceptions of the perfect appearance that priests or kings should have, let to exclusion of people who had congenital ear malformations and even to mutilation (cutting off the ears) as a method of punishment. CONCLUSION: The present study illustrates the wide variety and the long history of misconceptions related to children born with congenital malformations of the pinna and the external ear canal. These misconceptions may have led to a conscious and subconscious anxiety and pressure from parents and patients to ENT and plastic surgeons to correct the ear malformations as soon as possible in order to avoid psychological and social problems.

Long-term outcome of simultaneous repair of bilateral cleft lip and nose (a 15 year experience). T. Nakajima, H. Ogata, H. Sakuma. Department of Plastic and Reconstructive Surgery, School of Medicine, Keio University, Tokyo 160-8582, Japan. *British Journal of Plastic Surgery* (2003) April, Vol. 56 (3), pp. 205–17.
We have performed primary repair of bilateral cleft lip and nose on 169 patients in the past 15 years. During the first eight years, we used a small triangular flap skin design for the lip and for the nose correction, we used a corrective nasal cartilage lifting suture through rim incisions in order to bring the nasal dome cartilage toward the center and create the columella. The small triangular flap at the columbella base was rotated 90 degrees posteriorly to emphasize the contour of the nasolabial angle. In the subsequent 7-year period, the lip design was changed to the straight line method, and an inverted trapezoid suture was placed between alar and nasal dorsum at four points. By this procedure displaced cartilages are moved into correct position and the alar groove became more distinct. Long-term observations showed a favorable configuration of the nose, and eliminated the bilateral cleft nose stigma with only minimum degree of growth disturbance. The remaining problem is the somewhat superior faced nasal tip. To leave the bilateral cleft lip nasal deformity uncorrected for a long period places great psychosocial burden on the patient and the family. We believe that it is desirable to conduct early lip and nose repair synchronously in a minimally invasive manner, as a collaborative effort between plastic surgeons with specialized training in cleft lip repair and an interdisciplinary team.

Safety of nasal budesonide in the long-term treatment of children with perennial rhinitis. C. Moeller, H. Ahlstroem, K. A. Henricson, L. A. Malmqvist, A. Akerlund, H. Hildebrand. The Department of Paediatrics, University Hospital, Umeaa, Sweden. christian.moller@nin.dL1.se. *Clinical and Experimental Allergy* (2003) June, Vol. 33 (6), pp. 816–22.
BACKGROUND: Intranasal budesonide is an efficacious treatment for perennial allergic rhinitis. Long-term effects on safety, particularly in children, need further investigation. OBJECTIVE: To investigate the long-term safety of intranasal budesonide in children. METHODS: In an open trial, 78 children (5–15 years) with perennial rhinitis were treated with intranasal budesonide pressurized metered dose inhaler 200 microg twice daily (delivered daily dose 256 microg) for 12 months; 43 children stayed in the study for 12 additional months and were switched to aqueous suspension (400 microg delivered daily dose) for 6 months. Statural growth, bone age, ophthalmologic and rhinoscopic status, cortisol and biochemical analyses in blood and urine were monitored during the first and second years, and adverse events (AEs) were continuously recorded. RESULTS: No significant effects on statural growth and bone age, compared with reference values, were observed. Morning plasma cortisol and 24-h urinary cortisol were not changed during treatment. Patients reported 195 AEs, most commonly nasal dryness (30%), blood-tinged secretions (21 per cent) and, among non-nasal AEs, headache (13%). Rhinoscopy revealed no signs of mucosal atrophy, ulceration, or candidiasis but some nasal dryness. No treatment-related ophthalmological or biochemical aberrations were found. Reduction of blood eosinophils and nasal symptom scores, compared with pretreatment values, indicated the efficacy of budesonide treatment. CONCLUSION: Long-term treatment for 1–2 years with intranasal budesonide 256–400 microg daily in children with perennial rhinitis revealed no negative effects on growth or endogenous cortisol production. Local side-effects were mild and patient symptoms decreased.

Effects of age and age-related hearing loss on the neural representation of speech cues. K. L. Tremblay, M. Piskosz, P. Souza. Department of Speech and Hearing Sciences, University of Washington, 1417 NE 42nd St. Seattle, WA 98115, USA. tremblay@u.washington.edu. *Clinical neurophysiology* (2003) July, Vol. 114 (7), pp. 1332–43.
OBJECTIVE: To examine the effects of aging and age-related hearing loss the perception and neural representation of a time-varying speech cue. METHODS: P1, N1 and P2 cortical responses were recorded from younger and older normal-hearing adults, as well as older adults with age-related hearing loss. Synthetic speech tokens representing 10 ms increments along a/ba/-/pa voice-onset-time (VOT) continum were used to evoke the reponses. Each participant's ability to discriminate the speech tokens was also assessed. RESULTS: Compared with younger participants, older adults with and without hearing loss had more difficulty disciminating 10 ms VOT contrasts. In addition, both older groups elicited abnormal neural response patterns. There were no significant age-related findings for P1 latency; however, N1 latencies were prolonged for both older groups in response to stimuli with increased VOT durations. Also, P2 latencies were delayed for both older groups. The presence of age-related hearing loss resulted in a significant increase in N1 amplitude in response to voiceless stimuli. CONCLUSIONS: Aging and age-related hearing loss alter temporal response properties in the central auditory system. Because both older groups had difficulty discriminating these same speech stimuli, we conclude that some of the perceptual difficulties described by older adults might be due to age-related changes regulating excitatory and inhibitory processes. SIGNIFICANCE: Some of the speech understanding difficulties expressed by elderly adults may be related to impaired temporal precision in the aging auditory system. This might explain why older adults frequently complain that wearing a hearing aid makes speech louder, but does not necessarily improve their ability to understand speech.
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Intratympanic gentamicin for unilateral Ménière's disease: results of therapy. I. Bottrill, A. D. Wills, A. L. Mitchell. Department of Otolaryngology Radcliffe Infirmary, Oxford, Cambridge, UK. kris.dowdeswell@orh.nhs.uk. *Clinical Otolaryngology and Allied Sciences* (2003) April, Vol. 28 (2), pp. 133–41.
Patients with Ménière's disease that remains refractory to conservative treatment have traditionally been subjected to ablative surgery. The purpose of this prospective study was to evaluate the use of intratympanic gentamicin in eliminating incapacitating vertigo, while preserving hearing. Over the past 8 years, 83 patients have received between 1 and 6 intratympanic injections of gentamicin in an out-patient setting, with duration of therapy titrated to individual symptom response and effect on hearing. Using established AAO-HNS guidelines, we present data on 50 patients who have a minimum of 2 years follow-up. Control or significant improvement of definitive Ménière's attacks was achieved in 92 per cent of patients and hearing preserved or improved in 76 per cent. Only one patient experienced profound sensorineural hearing loss. We feel this treatment option should be considered and offered to patients in whom medical treatment has failed.

Health-related qualify of life five years after diagnosis of laryngeal carcinoma. M. Nordgren, H. Abendstein, M. Jannert, M. Boysen, E. M. Ahlner, E. Silander, K. Bjordal, E. Hammerlid. Department of Otorhinolaryngology, Malmoe University Hospital, Lund University, Malmoe, Sweden. mats.nordgren@skane.se. *International Journal of Radiation Oncology, Biology, Physics* (2003) August 1, Vol. 56 (5), p. 1333–43.
PURPOSE: To evaluate the health-related quality of life (HRQL) of patients with laryngeal carcinoma in a prospective longitudinal multicenter study at diagnosis, after 1 and 5 years in relation to

tumor location and treatment modality. SUBJECTS AND METHODS: Eighty-six patients (mean age 66 years; 84 per cent males) with laryngeal carcinoma were evaluated with standardized HRQL questionnaires: the European Organization for Research and Treatment of Cancer, Quality of Life Questionnaire Core-30 (EORTC QLQ-C30), the EORTC QLQ-Head and Neck Cancer Module (EORTC QLQ-HN35), and the Hospital Anxiety and Depression Scale (HADS). RESULTS: Some significant changes in HRQL were found between diagnosis and 5 years after diagnosis, depending on the treatment given. The patients' ability to speak improved whereas some general functions deteriorated and treatment-related side effects increased. When comparing HRQL at 1 and 5 years after diagnosis, it appears that most values at the 1-year follow-up assessment persist until 5 years, but a few deteriorate. The HRQL at diagnosis seems to be associated with survival rate after 5 years, and the global quality of life scale at diagnosis tends to predict HRQL after 5 years. CONCLUSIONS: The use of HRQL questionnaires is valuable when comparing different treatments and as an aid predicting treatment side effects. Evaluation of HRQL at diagnosis for patients with laryngeal carcinoma seems to be of value for the prognosis of HRQL over time and for the prognosis of survival.

Antioxidants in treatment of idiopathic sudden hearing loss. H. Z. Joachims, J. Segal, A. Golz, A. Netzer, D. Goldenberg. Department of Otolaryngology and Head Neck Surgery, Rambam Medical Center and Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel. joachims@rambam.health.gov.il. *Otology & Neurotology* (2003) July, Vol. 24 (4), pp. 572–5.
OBJECTIVE: Assuming that superoxide anion radicals (O(2)-) may play a role in damage to the inner ear, the authors investigated the possible benefit of vitamin E as an antioxidant in the treatment of idiopathic sudden hearing loss. STUDY DESIGN: Prospective, double-blind study. SETTING: The Department of Otolaryngology of Rambam Medical Center serves as a tertiary referral center for a population of 1.2 million people. PATIENTS: A total of 66 patients, aged 15 to 70 years, with diagnoses of idiopathic sudden hearing loss of less than 7 days' duration during 1998 to 2001, were included in the study. All were treated with bed rest, steroids, magnesium, and carbogen inhalation. The study group received vitamin E in addition. RESULTS: The recovery rate, calculated as hearing gain divided by the difference in hearing level between the affected and unaffected ear, was better than 75% in 41 of 66 (62.12 per cent) patients. This rate was achieved in 26 (78.78 per cent) patients in the study group treated with vitamin E, compared with 15 (45.45 per cent) patients in the control group. CONCLUSIONS: Patients treated with the addition of vitamin E achieved better recovery than did the control patients. Further studies should be directed toward a better understanding of the role of antioxidants in idiopathic sudden hearing loss.

Cochlear implantation and Cogan syndrome. E. Pasanisi, V. Vincenti, A. Bacciu, M. Guida, T. Berhenti, A. Barbot, J. G. Orsoni, S. Bacciu. Department of Ophthalmology and Otorhinolaryngology, University of Parma, Parma, Italy. enrico.pasanisi@unipr.it. *Otology & Neurotology* (2003) July, Vol. 24 (4), pp. 601–4.
OBJECTIVE: To evaluate outcomes and issues pertaining to cochlear implantation in a group of subjects affected by Cogan syndrome. STUDY DESIGN: Prospective cohort. SETTING: Department of Ophthalmology and Otorhinolaryngology, University of Parma. PATIENTS: Five postlingually deafened aults suffering from a typical form of Cogan syndrome who underwent cochlear implantation. MAIN OUTCOME MEASURES: Benefit from cochlear implantation as measured by word and everyday sentence recognition tests. Surgical issues and postoperative complications were also evaluated. RESULTS: In two cases, intracochlear electrodes were inserted into the scala vestibuli because of the ossification of the scala tympani. Two patients experienced a recurrence of keratitis the day after surgery. To date, with a follow-up of 1 to 4 years, no patient has experienced flap complications or other local or systemic complications. At the 12-month postoperative evaluation, all patients had gained useful open-set speech perception, achieving a means score of 91 and 95 per cent on word and everyday sentence recognition tests, respectively. CONCLUSIONS: Patients deafened by Cogan syndrome demonstrated high levels of speech understanding after undergoing cochlear implantation. Obliteration of the cochlea may complicate electrode implantation, requiring modifications of the surgical technique. Stress consequent to the surgical procedure may instigate an acute phase of the basic illness.

Clinical and histopathologic featues of recurrent vestibular schwannoma (acoustic neuroma) after stereotactic radiosurgery. D. J. Lee, W. H. Westra, H. Staecker, D. Long, J. K. Niparko, W. H. Slattery, 3rd. Department of Otolaryngology–Head and Neck Surgery, The Johns Hopkins School of Medicine, Baltimore, Maryland 21287, USA. *Otology & Neurotology* (2003) July, Vol. 24 (4), pp. 650–60.
OBJECTIVE: Stereotactic radiosurgery for vestibular schwannoma entails uncertain long-term risk of tumor recurrence and delayed cranial neuropathies. In addition, the underlying histopathologic changes to the tumor bed are not fully characterized. We seek to understand the clinical and histologic features of recurrent vestibular schwannoma after stereotactic radiation therapy. STUDY DESIGN: Retrospective review. SETTING: Tertiary referral center. PATIENTS: Four patients who underwent microsurgical resection of vestibular schwannoma after primary stereotactic radiation therapy. INTERVENTION: Patients were treated primarily with gamma knife radiosurgery or fractionated stereotactic radiotherapy followed by salvage microsurgery. Retrosigmoid craniotomy was used in all cases. MAIN OUTCOME MEASURES: Histopathologic review. Preoperative and postoperative facial nerve function was assessed with the House-Brackmann scale. RESULTS: We observed highly inconsistent radiation changes in the cerebellopontine angle and internal auditory canal. Fibrosis outside and withinthe tumor bed varied markedly, complicating microsurgical dissectino. Light microscopy confirmed the presence of viable tumor in all cases. Histopathologic features were typical of vestibular schwannoma, and there was no significant scarring that could be attributed to radiation effect. CONCLUSIONS: The variable fibrosis in the cerebellopontine angle and lack of radiation changes seen histopathologically in irradiated vestibular schwannoma suggest that a uniform treatment effect was not achieved in these cases. Although all four patients with preoperative cranial neuropathies were found intraoperatively to have fibrosis in the cerebellopontine angle, excellent preservation of facial nerve anatomy and function was possible with salvage microsurgical resection. Additional analyses are needed to clarify the histopathologic and molecular characteristics associated with vestibular schwannoma growth after stereotactic radiation.

Change in dizziness handicap after vestibular schwannoma excision. R. L. Humphriss, D. M. Baguley, D. A. Humphriss, R. L., Baguley, D. M., Moffat, D. A. Department of Audiology, Addenbrooke's Hospital, Cambridge, England, UK. ris34@cam.ac.uk. Changes in dizziness handicap after vestibular schwannoma excision. *Otology & Neurotology* (2003) July, Vol. 24 (4), p. 661–5, ISSN: 1531–7129.
OBJECTIVE: To evaluate the change in dizziness handicap after translabyrinthine vestibular schwannoma excision. STUDY DESIGN: Prospective administration of the Dizziness Handicap Inventory preoperatively and at 3 and 12 months postoperatively; retrospective review of case notes. SETTING: A tertiary referral neuro-otology clinic. PATIENTS: A total of 100 consecutive patients who had vestibular schwannomas excised between June 1998 and November 2001 and who had completed Dizziness Handicap Inventories preoperatively and at 3 and 12 months postoperatively. INTERVENTIONS: Translabyrinthine excision of a unilateral sporadic vestibular schwannoma; preoperative and postoperative generic vestibular rehabilitation exercises. MAIN OUTCOME MEASURES: Dizziness Handicap Inventory scores. RESULTS: For most patients, dizziness handicap does not worsen postoperatively. However, for those in whom it does, dizziness handicap becomes significantly worse between preoperative and 3-month postoperative time points but then does not continue to decline. Tumor size, sex, and magnitude and preoperative canal paresis significantly affect the degree of change in handicap. Age, the presence of central vestibular system abnormalities, and the nature of the patient's principal presenting symptom have no effect on this handicap change. CONCLUSIONS: These findings help the clinician in counselling the patient preoperatively about dizziness handicap to be expected postoperatively. In particular, the clinician is now able to take an informed and postive stance in the event of a severe canal paresis preoperatively.