

Abstract Selection

The effect of the season on otitis media with effusion resolution rates in the New York Metropolitan area. Gordon Michael A, Grunstein Eli, Burton William B. Department of Otolaryngology and Communicative Disorders, Section of Otolaryngology and Neurotology, Long Island Jewish Medical Center, 270-05 76th Avenue, New Hyde Park, NY 11040, USA. micagordon@yahoo.com *International Journal of Pediatric Otorhinolaryngology* 2004 Feb, Vol. 68 (2), pp. 191–5, ISSN 0165-5876.

OBJECTIVE: To study the relationship between season and resolution rates of otitis media with effusion (OME) in the New York Metropolitan area, in order to provide objective data useful to the practicing otolaryngologist in determining if seasonal factors should be considered in OME management decisions. **METHODS:** This was a prospective study of children referred to a tertiary medical centre. Children with OME (confirmed by pneumatoscopy and tympanometry) were followed by an otologist at an academic medical centre over a three year period. They returned approximately every six weeks until the end points of resolution of the effusions or ventilating tube placement. Each period between visits is termed an 'interval'. **RESULTS:** 127 patients with 231 effusions were followed for a total of 354 intervals. Effusions at intervals beginning in autumn were least likely to resolve by the next visit (24.29 per cent) while intervals ending in the summer had the greatest rate of resolution (44.32 per cent). Analyzed by month, the lowest rates of resolution were seen in intervals beginning in September, November, February, and March (16.67, 21.05, 20.51, and 19.15 per cent, respectively). Intervals beginning in May had the greatest chance of resolution (51.72 per cent). There was a positive correlation between resolution rates and average daily temperatures as reported by month. **CONCLUSIONS:** The season and month of the year are relevant factors in the clinical course of OME in the New York Metropolitan area. Based on the observed rates of resolution, one could reasonably consider taking a more conservative approach to OME management in May through August, and a more aggressive approach in the autumn and winter months.

Assessing candidate children for cochlear implantation with the Nottingham Children's Implant Profile (NChIP) the first 200 children. Nikolopoulos Thomas P, Dyar Dee, Gibbin Kevin P. Department of Otorhinolaryngology, Ippokraton Hospital, Athens University, 114 Queen's Sophia Avenue, Athens 115-27, Greece. thomas.nikolopoulos@nottingham.ac.uk *International Journal of Pediatric Otorhinolaryngology* 2004 Feb, Vol. 68 (2), pp. 127–35, ISSN 0165-5876.

BACKGROUND-OBJECTIVE: Nottingham Children's Implant Profile (NChIP) is a profile designed to assess candidate children for cochlear implantation. It includes the demographic details of the children (chronological age and duration of deafness), medical and radiological conditions, the outcomes of audiological assessments, language and speech abilities, multiple handicaps or disabilities, family structure and support, educational environment, the availability of support services, expectations of the family and deaf child, cognitive abilities, and learning style. The aim of the present study is to present the NChIP data obtained on the first 200 children implanted in the same cochlear implant programme and evaluate NChIP's use in the selection phase of cochlear implantation. **PATIENTS:** The study assessed 200 profoundly deaf children. Fifty-six children (28 per cent) were deafened by meningitis, 132 (66 per cent) were born deaf, and 12 (six per cent) were deafened from other causes (head injury, viral infection, progressive deafness). **RESULTS:** Chronological age at the time of assessment (before implantation) was the most common factor of major concern (nine per cent of the children studied) and the pre-implant language and speech abilities of the children was the most common factor of mild to moderate

concern, affecting 63 per cent of the children. The second most common factor of mild to moderate concern was duration of deafness (37 per cent) and the third was the learning style of the children (33 per cent). Availability of support services was the least factor of concern as 179 children (90 per cent) did not have any problems in this area. **CONCLUSIONS:** Earlier identification of deafness (by universal neonatal hearing screening programmes) may reduce age at implantation and duration of deafness as areas of concern in the future. However, the pre-implant language and speech abilities of the candidate children, the gap between chronological and language age, and the learning style of children are now emerging as key areas of research in the field. NChIP was found to be a very useful casework tool in the initial evaluation of the deaf children promoting and enhancing interdisciplinary teamwork across the different professionals. NChIP was also used as part of the decision-making process by the cochlear implant programme professionals and as a counselling tool for the parents. Finally, NChIP has helped to identify those children and families who need additional support. In the case of recently established paediatric cochlear implant programmes it would be a 'neutral' yet sensitive way of promoting good interdisciplinary collaboration and also peer support within team discussions when selecting children for cochlear implantation

Paediatric small cavity mastoid surgery second look tympanotomy. Dawes Patrick J D, Leaper Matthew. Department ORL-HNS, Dunedin Hospital, University of Otago, 201 Great King Street, Dunedin, New Zealand. patrickd@healthotago.co.nz *International Journal of Pediatric Otorhinolaryngology* 2004 Feb, Vol. 68 (2), pp. 143–8, ISSN 0165-5876.

OBJECTIVE: Following surgery for retraction pocket/cholesteatoma there is risk of residual disease, after canal wall up surgery a second look tympanotomy is routinely recommended. After canal wall down (CWDM) surgery this is not routine. In certain situations the senior author recommends second look tympanotomy. This report examines the outcome of this management paradigm applied to small cavity mastoid surgery for children. **METHOD:** A retrospective review of small cavity mastoid surgery for children with cholesteatoma or discharging retraction pocket disease. The primary procedure and surgical findings at second look tympanotomy are reported as well as the pre- and one-year post-operative air and bone conduction thresholds and air-bone gap averaged across frequencies 0.5, 1, 2 and 4 kHz and the mean pre- and post-operative bone conduction threshold at 4 kHz. A Student *t*-test was used to compare hearing results. **RESULTS:** Forty-five were children reviewed at one year. Twelve (27 per cent) were recommended second look tympanotomy, of which 10 had surgery; all were free of residual disease. At second look two children had ossiculoplasty performed, four had adhesions divided. Six children had formed a myringostapediopexy after their first surgery. The mean pre-op bone conduction threshold was 6.3 dB for those having single stage surgery and 5.6 dB for those having a second look and the post-operative thresholds were 7.8 and 10.2 dB, respectively. The mean pre-operative air conduction threshold was 32.6 dB for single stage surgery and 31.1 dB for staged surgery and at one year 29.2 and 40.8 dB. This was a significant difference. After second look, the air conduction threshold was 34.5 dB, and not significantly different from those who had single stage surgery. The mean pre-treatment 4 kHz bone conduction threshold was 6.3 and 5.6 dB for single stage surgery and second look tympanotomy and after surgery, respectively, 9.8 and 14.5 dB. These changes are not statistically significant. **CONCLUSION:** The small cavity mastoidectomy approach allows meticulous removal of disease from the middle ear and for certain indications second look tympanotomy is recommended. Planned second look

tympanotomy has demonstrated excellent early disease control as well as allowing timely management of any pathology affecting the middle-ear sound transformation mechanism.

SSRI use by tinnitus patients interactions between depression and tinnitus severity. Folmer Robert L, Shi Yong Bing. OHSU Tinnitus Clinic, Oregon Hearing Research Centre, Department of Otolaryngology, Oregon Health and Science University, 3181 SW Sam Jackson Park Rd, Portland, OR 97239, USA. folmerr@ohsu.edu *Ear, Nose, & Throat Journal* 2004 Feb, Vol. 83 (2), pp. 107–8, 110, 112 passim, ISSN 0145-5613.

Depression is often coincident with chronic tinnitus, and several studies have suggested that antidepressant medications may play a role in relieving tinnitus as well as depression. We conducted a retrospective study of the use of selective serotonin reuptake inhibitors (SSRIs) by patients at a large tinnitus clinic to assess the effects of these antidepressants on tinnitus severity. We focused on a subgroup of 30 patients with depression who had begun taking SSRI medication after the onset of their tinnitus; these patients had also been treated with psychotherapy by a mental health clinician. At a mean follow-up of 20.6 months, only 10 of the 30 patients reported that they were still experiencing major depression. Moreover, this group as a whole demonstrated a statistically significant improvement in tinnitus symptoms as reflected by a reduction in their Tinnitus Severity Index scores. We conclude that SSRIs represent one category of tools that can be used to help patients with severe tinnitus and depression. Like all antidepressant medications, SSRIs should be used in conjunction with psychotherapy to facilitate patient improvement.

Primary mucosal melanoma of the head and neck- a proposal for microstaging localized, Stage I (lymph node-negative) tumours. Prasad Manju L, Patel Snehal G, Huvos Andrew G, Shah Jatin P, Busam Klaus J. Department of Pathology, Memorial Sloan-Kettering Cancer Centre, New York, New York, USA. prasad-1@medctr.osu.edu *Cancer* 2004 Apr 15, Vol. 100 (8), pp. 1657–64, ISSN: 0008-543X.

BACKGROUND: The current study was conducted to identify histological predictors of survival in patients with localized, lymph node-negative (Stage I, N_0M_0) primary mucosal melanomas of the head and neck (HNMM). **METHODS:** The histology of 39 sinonasal, 20 oral, one pharyngeal, and one laryngeal Stage I HNMM was reviewed by two pathologists without knowledge of patient outcome. The invasion was evaluated as Level I: melanoma in situ (without invasion or with microinvasion only); Level II: invasion into the lamina propria only; and Level III: invasion into deep tissue (e.g., skeletal muscle, bone, or cartilage). The tumour architecture was defined as pseudopapillary when tumour cells clustered around blood vessels resembling papillae and sarcomatoid when they resembled high-grade pleomorphic sarcoma. Survival analysis was performed with Kaplan-Meier survival curves using disease-specific survival (DSS) as the endpoint. **RESULTS:** The five-year DSS rate was 43 per cent (median, 41.5 months). The median survival was found to decrease significantly with increasing level of invasion: Level I ($n = 4$): 138 months; Level II ($n = 29$): 69 months; and Level III ($n = 28$): 17 months ($p = 0.003$). The presence of pseudopapillary and sarcomatoid architecture ($n = 20$) and undifferentiated cells ($n = 16$) were found to be associated with a significantly poor DSS ($p < 0.05$). However, on multivariate analysis, only the level of invasion remained an independent predictor of survival ($p = 0.03$). Tumour thickness, vascular invasion, and necrosis were found to have no significant influence on survival. **CONCLUSIONS:** Microstaging according to invasion into three tissue compartments was found to be a significant and independent predictor of poor survival in patients with localized, lymph node-negative, Stage I HNMM. The presence of sarcomatoid and pseudopapillary architecture and undifferentiated cells also appear to be associated with significantly poor DSS. Copyright 2004 American Cancer Society.

Aesthetic reconstruction of the nasal tip using a folded composite graft from the ear. Kim Yong Oock, Park Beyoung Yun, Lee Won Jae. Institute of Human Tissue Restoration, Department of Plastic Surgery, College of Medicine, Yonsei University, 134 Shinchon-dong, Seodaemoon-ku, C P 0 Box 8044, Seoul, South Korea. *British Journal of Plastic Surgery* 2004 Apr, Vol. 57 (3), pp. 238–44, ISSN 0007-1226.

Defects of the nasal tip, the alar, and the columella were treated with composite grafts from the postauricular area. The graft was folded into a three-dimensional shape, which provided a three-layered reconstruction of skin, cartilage and nasal lining. This procedure preserved the shape of the reconstruction for a longer time and yielded a good aesthetic result. Moreover, although this method was simple and was carried out in one stage, it left minimal morbidity of the donor site, and produced satisfying results.

Non-operative management of complete tracheal rings. Rutter Michael J, Willging J Paul, Cotton Robin T. Division of Pediatric Otolaryngology/Head & Neck Surgery, Cincinnati Children's Hospital Medical Centre, OH 45229-3039, USA. mike.rutter@cchmc.org *Archives of Otolaryngology-Head & Neck Surgery* 2004 Apr, Vol. 130(4), pp. 450–2, ISSN 0886-4470.

BACKGROUND: Children with complete tracheal rings are often challenging to manage. Most children will present early with a severely compromised airway and will require tracheal reconstruction. **OBJECTIVE:** To show that a small number of minimally symptomatic patients with complete tracheal rings experience airway growth over time and do not require tracheoplasty. **DESIGN:** A retrospective medical chart review over a 10-year period. **SETTING:** A tertiary care pediatric hospital. **PATIENTS:** Children ($n = 10$) with a diagnosis of complete tracheal rings, confirmed on bronchoscopy, who were observed for a minimum of one year prior to determining the need for tracheoplasty. **MAIN OUTCOME MEASURES:** Patient symptoms, bronchoscopic findings, airway size, and the progression of these over time. Other congenital anomalies, the reason for initial diagnosis, and the need for tracheoplasty were documented. **RESULTS:** The 10 patients in our series fell into the following three categories: five patients were minimally symptomatic or asymptomatic, showed bronchoscopic evidence of progressive airway growth, and did not require tracheoplasty; two patients had worsening symptoms of exercise intolerance, showed minimal airway growth, and ultimately required tracheoplasty; and three patients are still being clinically observed and may eventually require tracheoplasty. Periods of observation have varied from one year to over 12 years. **CONCLUSIONS:** Not all patients with complete tracheal rings require tracheoplasty. Some have satisfactory airway growth and do not require airway reconstruction. A period of observation to monitor airway growth and clinical symptoms is safe and may spare some patients from undergoing unwarranted airway reconstruction.

Persistent vertigo following particle repositioning manoeuvres an analysis of causes. Rupa Vedantam. Department of Ear, Nose, and Throat/Speech and Hearing, Christian Medical College and Hospital, Vellore, India. rupavedantam@cmcvellore.ac.in *Archives of Otolaryngology-Head & Neck Surgery* 2004 Apr, Vol. 130(4), pp. 436–9, ISSN 0886-4470.

OBJECTIVE: To analyze the causes of persistent vertigo following treatment with particle repositioning (PRMs) in patients with benign paroxysmal positional vertigo. **DESIGN:** Prospective study of outcomes in patients with benign paroxysmal positional vertigo. **STUDY SETTING:** Out patient clinic of a tertiary care referral centre. **PATIENTS:** A sample of 90 consecutive patients with documented benign paroxysmal positional vertigo of the posterior semicircular canal who had persistent vertigo after at least three sessions of PRMs during a period of two weeks. **INTERVENTION:** Particle repositioning using a modified Epley manoeuvre. **MAIN OUTCOME MEASURE:** Persistent vertigo following at least three sessions of PRMs over a period of two weeks. **RESULTS:** Seven patients showed partial or no improvement following treatment. The causes subsequently determined included coincident horizontal canal positional vertigo (two cases), Ménière's disease (two cases), persistent posterior canal benign paroxysmal positional vertigo in association with cervical spondylosis (two cases), and a posterior fossa meningioma (one case). **CONCLUSIONS:** Patients with persistent or frequently recurring positional vertigo following treatment with PRMs should undergo detailed investigation to exclude coincidental pathology for which specific treatment is required. In patients in whom no coincident pathology requiring therapy is identified, treatment options other than the PRM already instituted should be considered.

Clinical predictors of quality of life in patients with head and neck cancer. Terrell Jeffrey E, Ronis David L, Fowler Karen E, Bradford Carol R, Chepeha Douglas B, Prince Mark E, Teknos Theodoros N, Wolf Gregory T, Duffy Sonia A. Department of Otolaryngology, University of Michigan, Ann Arbor 48109-0312, USA. TerrellJ@umich.edu *Archives of Otolaryngology-Head & Neck Surgery* 2004 Apr, Vol. 130 (4), pp. 401-8, ISSN 0886-4470. **OBJECTIVE:** To identify clinical predictors of quality of life (QoL) in a head and neck cancer patient population. **DESIGN, PATIENTS, AND SETTING:** A convenience sample of 570 patients with upper aerodigestive tract cancers were surveyed at a tertiary care oncology clinic and Veterans Affairs Otolaryngology clinic. **INTERVENTIONS:** A self-administered health survey was constructed to collect demographic, health, smoking, alcohol, depression symptom, and QoL information. Tumour site and tumour stage, clinical, and treatment data were abstracted from the patient medical records. **MAIN OUTCOME MEASURES:** Quality of life was assessed using the Medical Outcomes Study Short-Form 36-item Health Survey (SF-36) and the Head and Neck QoL (HNQoL) instrument. **RESULTS:** Of the 570 eligible respondents, the presence of a feeding tube had the most negative impact on QoL, with significant decrements in six of the eight SF-36 scales and all four HNQoL scales ($p < .01$). In descending order of severity, medical comorbid conditions, presence of a tracheotomy tube, chemotherapy, and neck dissection were also associated with significant ($p < .05$) decrements in QoL domains. Patients who took the survey more than one year after diagnosis had improved QoL in seven of 12 domains. Hospital site, age, education level, sex, race, and marital status were also significant predictors of QoL. **CONCLUSION:** There are at least 13 demographic and clinical characteristics that are significant predictors of QoL in patients with head and neck cancer, which should be considered when treating patients and conducting QoL studies in the future. Grant ID: 1 P50 CA97248, Acronym: CA, Agency: NCI.

Longitudinal effects of Botox injections on voice-related quality of life (V-RQOL) for patients with adductory spasmodic dysphonia part II. Rubin Adam D, Wodchis Walter P, Spak Constance, Kileny Paul R, Hogikyan Norman D. Department of Otolaryngology, University of Michigan, Ann Arbor 48109-0312, USA. *Archives of Otolaryngology-Head & Neck Surgery* 2004 Apr, Vol. 130(4), pp. 415-20, ISSN 0886-4470.

OBJECTIVE: To investigate the longitudinal effects of botulinum toxin type A (Botox) injections on voice-related quality of life (V-RQOL) for patients with adductory spasmodic dysphonia. **DESIGN:** Prospective study. **SETTING:** Academic tertiary care referral centre. **PARTICIPANTS:** Forty-two patients who presented to our institution with dysphonia and were diagnosed as having adductory spasmodic dysphonia during a 38-month period. **INTERVENTION:** Patients received Botox injections into both thyroarytenoid muscles via the cricothyroid membrane. The typical starting dose was 1.0 U per vocal fold. If necessary, the dosage was adjusted in subsequent injections to reduce adverse effects or to enhance duration of benefit. **MAIN OUTCOME MEASURES:** Patients filled out questionnaires, including the V-RQOL Measure and a self-assessed overall voice rating, before each injection. Postinjection questionnaires were completed six to eight weeks after each treatment. Mean pre-treatment and post-treatment scores were calculated for each treatment. **RESULTS:** The number of treatments per patient ranged from one to seven. Statistically significant improvements in mean total and domain V-RQOL scores were calculated for every injection ($p < .01$) (no post-injection questionnaires were available for the seventh injections). The magnitude of the effect remained constant for later injections. Eighty-two per cent of the population recorded at least one category of improvement in overall self-assessed voice rating with each injection. **CONCLUSIONS:** Botox has a significant beneficial effect on V-RQOL for at least six injection cycles. This study demonstrates the efficacy of Botox for treating patients with adductory spasmodic dysphonia and further illustrates the usefulness and validity of the V-RQOL Measure in evaluating patients with dysphonia.

The impact of sinus computed tomography on treatment decisions for chronic sinusitis. Anzai Yoshimi, Weymuller Ernest A Jr, Yueh Bevan, Maronian Nicole, Jarvik Jeffrey G. IN Department of Radiology, University of Washington, Seattle 98195-7115 USA.

anzai@u.Washington.edu *Archives of Otolaryngology-Head & Neck Surgery* 2004 Apr, Vol. 130(4), pp. 423-8 ISSN 0886-4470.

OBJECTIVES: To determine the impact of sinus computed tomography (CT) on treatment decisions by otolaryngologists and to explore the factors leading to choice of surgical treatment for patients suspected of having chronic sinusitis. **DESIGN:** Prospective cohort study. **SETTING:** A tertiary academic medical centre. **PATIENTS:** Questionnaires were administered to three otolaryngologists in a tertiary academic institution regarding diagnosis and treatment decisions in 27 patients suspected of having chronic sinusitis, before and after they reviewed sinus CT scans. **MAIN OUTCOME MEASURES:** The dichotomous decisions regarding surgical or nonsurgical treatment and the agreement of treatment decisions among surgeons were evaluated. The factors strongly influencing surgeons' treatment decisions regarding patients selected for surgery were also determined. **RESULTS:** The dichotomous treatment decisions were changed in one third of patients (nine of 27) after the sinus CT scans were reviewed. The agreement of treatment decisions among the three surgeons was markedly improved after they reviewed sinus CT scans. The factors favourably influencing surgical treatment were obstruction of the ostiomeatal complex on CT and concordance of CT abnormality with a patient's symptoms. Lund-Mackay stage, symptoms, and corticosteroid or antibiotic use were not significant predictors. **CONCLUSIONS:** Despite the common belief that treatment decisions for chronic sinusitis should be solely based on clinical grounds, with sinus CT providing only anatomical detail before surgery, our study indicates that the decision to perform surgery was altered by CT in a substantial portion of the patients. In our preliminary study, CT increased the tendency to elect surgical treatment by all three surgeons.

Mandibular reconstruction are two flaps better than one? Gabr Essem, Kobayashi Mark R, Salibian Arthur H, Armstrong William B, Sundine Michael, Calvert Jay W, Evans Gregory R D. Aesthetic and Plastic Surgery Institute, The University of California-Irvine, Orange, 92868, USA. *Annals of Plastic Surgery* 2004 Jan, Vol. 52 (1), pp. 31-5, ISSN 0148-7043

This study compared the combined iliac and ulnar forearm flaps with the osteomusculocutaneous fibular free flap for mandibular reconstruction. A retrospective study of 40 patients who had oromandibular reconstruction was performed, of whom 23 patients had a combined iliac crest without skin and ulnar forearm free flap. Seventeen patients had an osteomusculocutaneous free fibular flap. Ten women and 30 men with a mean age of 57.5 years comprised this study population. Ninety per cent of the cases were squamous cell carcinoma (55 per cent, T4), of which 11 per cent were recurrent tumours. Anterolateral mandibular defects constituted 52.9 per cent of the fibular reconstructions and 60.9 per cent accounted for the iliac/ulnar reconstructions. The mean bone gaps were 8.79 cm and 8.95 cm respectively. Functional evaluation was based on the University of Washington Questionnaire through telephone calls and personal communication. The mean hospital stay was 15.43 days and 10.09 days for the fibular and iliac/ulnar flaps respectively. The facial artery (64.7 per cent) and facial vein (60 per cent) were the main recipient vessels for the fibular reconstructions whereas the external carotid artery (95.6 per cent) and the internal Jugular vein (66.7 per cent) were the main recipient vessels for the iliac/ulnar reconstruction. Overall flap survival was 96.8 per cent (100 per cent of fibular flaps and 95.65 per cent of iliac/ulnar flaps). Two flaps were lost in the iliac/ulnar series because of unsalvageable venous thrombosis. Local complications for the iliac/ulnar flaps were 30.4 per cent but were 5.9 per cent for the fibular reconstructions. Function such as speech, swallowing, and chewing were notably better in the fibular than the iliac/ulnar group in 23 of the patients tested. The cosmetic acceptance of 77.8 per cent of the fibular flaps was judged to be excellent and good, whereas 71.4 per cent of the iliac/ulnar flaps were rated good. It appears that within this study population the free osteomusculocutaneous fibular flap had fewer local complications and a higher flap survival rate than the combined iliac/ulnar forearm flaps. Overall functional outcome was also improved. The use of the double flap may be appropriate in massive oromandibular defects but may be less appropriate in more modest functional reconstructions of mandibular defects.

Role of low-molecular-weight heparins in the treatment of sudden hearing loss. Yue Wen L, Li Pel, Qi Pei Y, Li Hui J, Zhou Hong. Department of Otolaryngology, Pingdingshan People's Hospital, No 1, 117 you-yue Road, Pingdingshan City, Henan 467000, P. R. China. *American Journal of Otolaryngology* 2003 Sep-Oct, Vol. 24 (5), pp. 328–33, ISSN 0196-0709.

OBJECTIVE: For the present, no definitive treatment is universally accepted for sudden sensorineural hearing loss (SNHL). The goal of this study was to evaluate the role of low-molecular-weight heparins in its therapeutic regimen. **METHODS:** A retrospective analysis has been taken in 100 patients with SNHL in which they were divided into two groups: 50 patients received therapy with and without low-molecular-weight heparins. The audiogrammetric data at pre-treatment were compared with data at day 10 and with data collected at follow-up (average 20 days). **RESULTS:** The results showed that there was a significant improvement for early or late audiometric outcome in group 1 when compared with group 2 ($p < .05$). Forty-three patients (86 per cent) were classified into recovery or good improvement in group 1, which was higher than group 2 ($p < .01$). The improvement rate was calculated for each of the 100 patients, and the average value was 84. Seventy per cent in group 1 and 70 per cent in group 2. **CONCLUSION:** It is concluded that the use of low-molecular-weight heparins considerably improves the curative rate in the hearing improvement of sudden sensorineural hearing loss without such potential risk as unfractionated heparins.

Endoscopic approach to lesions of the sphenoid sinus, orbital apex, and clivus. Kingdom Todd T, Delgaudio John M. Department of Otolaryngology, University of Colorado Health Sciences Centre, Denver, Colorado, USA. todd.kingdom@uchsc.edu *American Journal of Otolaryngology* 2003 Sep-Oct, Vol. 24 (5), pp. 317–22, ISSN 0196-0709.

OBJECTIVE: The expanding role of endoscopic management of sinonasal disorders includes approaches to the skull base. In this report, we review our experience approaching lesions of the sphenoid sinus, orbital apex, and clivus via a transnasal endoscopic technique. **DESIGN:** A retrospective, case series review of 15 patients presenting with skull base lesions approached via an endoscopic approach was performed. Emphasis was placed on analyzing the pre-operative planning strategy and the surgical technique. **SETTING:** Academic referral centre. **RESULTS:** We reviewed the medical records of 15 patients who underwent an endoscopic approach to the sphenoid sinus, orbital apex, or clivus. Ten patients presented with lesions of the sphenoid sinus and clivus. The lesions in this patient group included metastasis to the cavernous sinus and clivus (three); fibrous dysplasia (two); plasmacytoma of the clivus (two), and one patient each with cholesterol granuloma, meningoencephalocele, and recurrent teratoma. Five patients presented with lesions of the orbital apex. These included invasive fungal sinusitis (two), mucopyocele (two), and pseudotumour (1). Image-guided surgical navigation was used in each case, and all approaches consisted of entirely endoscopic transnasal techniques. **CONCLUSIONS:** Endoscopic approaches to the skull base are possible because of advancements in technology now available to the rhinologic surgeon. This report highlights the pre-operative strategies and surgical techniques used in approaching lesions of the sphenoid sinus, orbital apex, and clivus. These extended techniques should provide a more direct, less invasive, and more cost-effective method for approaching select skull base lesions.

Posterior fossa arachnoid cysts can mimic Ménière's disease. O'Reilly Robert C, Hallinan Erin K. Division of Otolaryngology, Nemours Children's Clinic-Wilmington, Alfred I duPont Hospital for Children, Wilmington, DE 19899, USA. roreilly@nemours.org *American Journal of Otolaryngology* 2003 Nov-Dec, Vol. 24 (6), pp. 420–5, ISSN: 0196-0709.

Arachnoid cysts constitute one per cent of all intracranial space-occupying lesions. In the posterior fossa, they typically produce vague, nonspecific symptoms. However, a subset of these lesions can produce signs and symptoms indistinguishable from those of Ménière's disease. We discuss the clinical and laboratory features of two cases of posterior fossa arachnoid cysts mimicking Ménière's disease as well as the substantial resolution of symptoms in one patient after cysto-peritoneal shunt. Posterior fossa arachnoid cyst must be considered in the differential diagnosis of patients presenting with signs and symptoms of Ménière's disease.

Efficacy of particle repositioning manoeuvre in BPPV: a prospective study. Simhadri Sridhar, Panda Naresh, Raghunathan Meena. Department of Otolaryngology, Head and Neck Surgery, Chandigarh, India. *American Journal of Otolaryngology* 2003 Nov-Dec, Vol. 24 (6), pp. 355–60, ISSN: 0196-0709.

PURPOSE: A single blinded prospective randomized controlled trial was conducted in 40 patients with benign paroxysmal positional vertigo (BPPV) to determine the efficacy of the particle repositioning manoeuvre (PRM). **MATERIALS AND METHODS:** Out of 40 patients, 20 underwent PRM with the rest receiving a placebo treatment. Postprocedural instructions were given to all the patients who underwent PRM. Follow-up was for one year at regular intervals. Analysis was based on the symptomatic status and the Hallpike manoeuvre at each visit. **RESULTS:** After the initial week, 95 per cent showed complete resolution of symptoms with none reporting a recurrence after PRM. On the contrary, only 15 per cent of the controls had complete resolution with 14 out of 20 reporting a recurrence of BPPV. Results remained more or less the same at the end of four weeks. Six months after PRM, 19 of 20 patients had no vertigo with a meager five per cent showing recurrence versus 75 per cent of controls reporting a recurrence with only three of 20 reporting a favourable symptom status. At the end of one year, 18 of 20 patients had complete relief from symptoms with only 10 per cent showing Hallpike manoeuvre positive in the study group compared with three of 20 reporting a relief from symptoms with 90 per cent turning out to be Hallpike manoeuvre positive in the control group. **CONCLUSIONS:** This study establishes the efficacy of PRM in short- and long-term management of BPPV; the procedure is easy and simple.

Verrucous carcinoma of the paranasal sinuses case report and clinical update. Palen Vinidh, Orvidas Laura J, Wight Richard G, Bradley Patrick J. Department of Otolaryngology-Head and Neck Surgery, North Riding Infirmary, Middlesbrough, UK. vinidpa@hotmail.com *Head & Neck* 2004 Feb. Vol. 26 (2), pp. 184–9, Refs 35, ISSN 1043-3074. English.

BACKGROUND: Verrucous carcinoma is a low-grade malignancy that has been reported to occur in all anatomical sites of the head and neck. Fourteen cases of verrucous carcinoma of paranasal sinus origin have been reported to date in the English literature. **METHODS:** Case report and retrospective review of all cases of verrucous carcinoma of the paranasal sinuses in the English literature. All authors were contacted to provide missing data and long-term follow-up. **RESULTS:** Five of the eight authors contacted responded, and the most current data from all 15 cases was compiled. Eleven of the 15 patients (73 per cent) were men and ranged in age from 35 to 81 years (median, 68 years). The maxillary sinus is the most common paranasal sinus involved (93 per cent). Presentation often occurred late, with 12 of 15 (80 per cent) initially being seen at stage T₃ or higher. Surgical excision was the treatment of choice, and median disease-free survival was 54 months. **CONCLUSIONS:** Verrucous carcinoma of the paranasal sinuses is a rare but potentially curable disease. Treatment is surgical, and prognosis is good with early intervention. Copyright 2003 Wiley Periodicals, Inc. *Head Neck* 26: 184–189, 2004.

The expression of key cell cycle markers and presence of human papillomavirus in squamous cell carcinoma of the tonsil. Li Wei, Thompson Carol H, Cossart Yvonne E, O'Brien Christopher J, Me Neil Edward B, Scolyer Richard A, Rose Barbara R. Sydney Head and Neck Cancer Institute, PO Box M 142, Missenden Road, Camperdown, NSW 2050, Australia. *Head & Neck* 2004 Jan, Vol. 26 (1), pp. 1–9, ISSN 1043-3074. English.

BACKGROUND: Chemical carcinogens induce squamous cell carcinoma (SCC) of the head and neck by targeting the p53 and the retinoblastoma (pRb) pathways. Human papillomavirus (HPV) might have an aetiological role in these cancers at particular sites. Few studies have compared cell cycle protein expression in HPV-positive and HPV-negative tumours in this region. **METHODS:** Fifty tonsil SCCs were analyzed for HPV by PCR and for expression of cell cycle proteins (p53, pRb, p16(INK4A), p21 (CIP1/WAF1), p27(KIP1), and cyclinD1) by immunohistochemistry. **RESULTS:** HPV was present in 42 per cent, almost all were type 16. There were statistical associations between HPV positivity and reduced expression of pRb and cyclinD1, overexpression of p16, and younger patient age. Tumour

with down-regulated p27 tended to have down-regulated pRb and p21. **CONCLUSIONS:** HPV-positive tonsil SCCs have distinct molecular pathways. Their association with younger patient age suggests that they are biologically distinct from HPV-negative tumours. Copyright 2004 Wiley Periodicals, Inc.

Botulinum toxin type A for the treatment of chronic neck pain after neck dissection. Vasan Claus Wittekindt, Liu Wei Chi, Klusmann Jens Peter, Guntinas Lichius Orlando. University Hospital Cologne, Department of Otorhinolaryngology, Head and Neck Surgery, Joseph-Stelzmann-Strasse 9, D-50924 Koein, Germany. claus.wittekindt@uni-koeln.de *Head & Neck* 2004 Jan, Vol. 26 (1), pp. 39–45, ISSN: 1043-3074. English.

BACKGROUND: Neck dissection surgery is often followed by chronic head and neck pain. To date optimal treatment of this type of pain is lacking. Botulinum toxin type A (BTX-A) has been shown to be effective in the treatment of myofascial pain syndrome and headache. In a pilot study, we wanted to test the effectiveness of BTX-A for the treatment of chronic neck pain after neck dissection. **METHODS:** Sixteen patients with chronic neck pain after neck dissection were included in this prospective, open study. Eighty to 320 units of BTX-A (Dysport) were injected into muscular trigger points. Outcome measures included chronic pain and shooting pain on the basis of visual analogue scales and quality of life improvement (EORTC QLQ-C-30; EORTC QLQ-H and N35) before and four weeks after treatment. **RESULTS:** Patients showed a significant reduction in chronic pain (4.5 before to 3.3 after treatment, $p = .005$) and in shooting pain (6.1 before to 4.7 after treatment, $p = .005$). There was a trend toward improvement in global quality of life (QLQ-C30, $p = .097$) and an increase on the functional scale 'pain' (QLQ-H and N35, $p = .071$). **CONCLUSIONS:** BTX-A treatment of subjects with chronic neck pain after neck dissection resulted in a fast and significant reduction of pain. A significant improvement in quality of life may be expected in a longer time course after treatment. Copyright 2004 Wiley Periodicals, Inc.

Acinic cell carcinoma of the parotid gland presenting as an external auditory canal mass. Prasad Mukesh, Kraus Dennis H. Head and Neck Service, Department of Surgery, Memorial Sloan-Kettering Cancer Centre, New York, NY 10021, USA. mukeshprasad@post.harvard.edu *Head & Neck* 2004 Jan, Vol. 26 (1), pp. 85–88, ISSN: 1043-3074. English.

BACKGROUND: The fissures of Santorini have long been known as a gateway for disease to pass from the external auditory

canal to the periparotid and neck spaces. Although anatomically understandable, description of disease that originates in the parotid gland and extends through the fissures to the external auditory canal is rare. This is, in fact, the first presentation of such a patient at our institution in a previously untreated patient. **METHODS:** A 43-year-old woman was seen with a mass in her right external auditory canal. Further evaluation found this to be the presenting finding of a parotid neoplasm. The patient also had a right marginal mandibular paresis. Biopsy of the external auditory canal mass provided a diagnosis of an acinic cell adenocarcinoma. She underwent a right lateral temporal bone resection, type III modified neck dissection, and radical parotidectomy with facial nerve sacrifice and rectus abdominus reconstruction with facial nerve grafting. **RESULTS:** Pathological examination of the specimen revealed an acinic cell carcinoma of the right parotid gland with focal dedifferentiation into a high-grade adenocarcinoma. **CONCLUSIONS:** Care should be taken with auditory canal masses to remember the possibility that disease is extending from the parotid through the fissures of Santorini, and evaluation and management should proceed accordingly. Copyright 2004 Wiley Periodicals, Inc.

Sinonasal neuroendocrine carcinoma in association with SIADH. Vasan Niles R, Medina Jesus E, Canfield Vikki A, Gillies Elizabeth M. Department of Otorhinolaryngology, The University of Oklahoma Health Sciences Centre, PO Box 26901, WP 1360, Oklahoma City, Oklahoma 73190, USA. *Head & Neck* 2004 Jan, Vol. 26(1), pp. 89–93, ISSN 1043-3074. English.

BACKGROUND: Neuroendocrine carcinoma (NEC) is a rare malignancy of the nasal cavity or paranasal sinuses. The syndrome of inappropriate ADH secretion (SIADH) has not been previously reported in association with this cancer. **METHODS:** We report a 30-year-old woman with histologically confirmed neuroendocrine carcinoma who also demonstrated SIADH. After successful chemotherapy and radiotherapy treatment for the neoplasm, her SIADH resolved. A literature search found eight cases of olfactory neuroblastoma (ONB) associated with SIADH, four of which resolved after treatment of the malignancy. **RESULTS:** Treatment of the underlying malignancy resulted in the immediate resolution of the SIADH. **CONCLUSIONS:** We report the first case of SIADH associated with NEC, which resolved after treatment of the cancer. A direct cause and effect between ONB/nasal NEC and SIADH has been established in previous reports. Copyright 2004 Wiley Periodicals, Inc.