

## Abstract Selection

**Community-acquired methicillin-resistant *Staphylococcus aureus* infections in discharging ears.** Hwang, J. H., Tasi, H. Y., Liu, T. C. Department of Otolaryngology, Pho-Ai Hospital, Lotung, Taiwan. *Acta Oto-Laryngologica* (2002) December, Vol. 122 (8), pp. 827–30. OBJECTIVES: Although community-acquired methicillin-resistant *Staphylococcus aureus* (MRSA) infections have recently become an increasing problem in various fields of medicine, they have rarely been studied in the ear. The purpose of this study was to determine the prevalence of community-acquired MRSA infections in discharging ears and to compare the epidemiology of MRSA with that of other pathogens. MATERIAL AND METHODS: Between August 2000 and February 2002, 248 isolates recovered from 221 discharging ears of patients with three disease entities (chronic otitis media, acute otitis externa and granular myringitis) were prospectively analysed using bacteriology. The isolates analysed using bacteriology were divided into three groups: MRSA, methicillin-susceptible *S. aureus* (MSSA) and non-SA. RESULTS: *S. aureus* was found in 108 (43.5 per cent) isolates and MRSA in 27. Therefore, the percentage of MRSA among the *S. aureus* isolates was 25 per cent (27/108). The prevalence of community-acquired MRSA infections in discharging ears was 12.2 per cent (27/221) and the MRSA strains were highly susceptible to vancomycin, teicoplanin, fusidic acid and minocycline. The MRSA-infected patients were older than those infected with other groups of pathogens. Also, MRSA infections appeared to be more common in chronic otitis media than in acute otitis externa or granular myringitis. CONCLUSIONS: Community-acquired MRSA represents an increasing problem. In this study, MRSA strains were highly susceptible to vancomycin, teicoplanin, fusidic acid and minocycline.

**Factors affecting recovery after acoustic neuroma resection.** Cohen, H. S., Kimball, K. T., Jenkin, H. A. Bobby R. Alford Department of Otorhinolaryngology and Communicative Sciences, Baylor College of Medicine, Houston, Texas 77030, USA. hcohen@bcm.tmc.edu. *Acta Oto-Laryngologica* (2002) December, Vol. 122 (8), pp. 841–50.

In order to determine which variables influence recovery from acoustic neuroma resection, acutely postoperative patients were divided into two groups and treated twice daily at bedside as inpatients at a tertiary care center. Treatment times were increased gradually from five to 30 min. Exercise subjects underwent passive and active head movements and walking with augmented head movements. Control subjects received attention without exercise. Pre- and post-tests included vertigo intensity and frequency, low-frequency vestibulo-ocular reflex (VOR), posturography and path integration. Post-tests were given at discharge and at approximately four week intervals for three months. Multilevel statistical analyses showed that neither group assignment nor age affected the outcome. All measures were abnormal at discharge but improved towards normal within three weeks. VOR on the unoperated side returned to normal values but on the lesioned side did not. Therefore, compensation is influenced by tumour size but not by age or early postoperative vestibular rehabilitation. Most compensation occurs within three weeks, probably due to central mechanisms, although some measures may not recover completely.

**The paranasal sinuses as reservoirs for nitric oxide.** Andersson, J. A., Cervin, A., Lindberg, S., Uddman, R., Cardell, L. O. Department of Otorhinolaryngology, Malmö University Hospital, Malmö, Sweden. *Acta Oto-Laryngologica* (2002) December, Vol. 122 (8), pp. 861–5.

OBJECTIVE: Nitric oxide (NO) is an important mediator and inflammatory marker in human upper airways. Enzymes respon-

sible for NO production have been demonstrated both in the nose and in the paranasal sinuses, but NO levels in the sinuses are reported to be several times higher than those in the nose. It has been postulated that the paranasal sinuses may be the primary sites for NO production in the upper respiratory tract. The present study was designed to compare the NO levels sampled from the nose with those found in the paranasal sinuses. MATERIAL AND METHODS: NO levels in the maxillary sinus and nose were determined using a continuous chemiluminescence measuring technique in seven healthy volunteers. RESULTS: When NO was sampled, via a drainage tube inserted into the maxillary sinus, a transient peak in NO level was recorded. The maximal NO level ( $5,761 \pm 1,513$  ppb;  $n=7$ ) was reached within 10 s and was followed by the establishment of a lower steady-state level ( $304 \pm 51$  ppb). When NO was continuously sampled from the nose a steady-state level, similar to that found in the sinus, was immediately established ( $313 \pm 52$  ppb). CONCLUSION: The data presented confirm previous findings of extremely high NO levels in the paranasal sinuses and suggest that these cavities may also function as reservoirs for NO.

**Cricoid area of the larynx: its physiological and pathological significance.** Sato, K., Umeno, T., Hirano, M., Nakashima, T. Department of Otolaryngology–Head and Neck Surgery, Kurume University School of Medicine, Kurume, Japan. *Acta Oto-Laryngologica* (2002) December, Vol. 122 (8), pp. 882–6.

The three-dimensional distribution of the cricoid area was investigated using computer graphics and its histological structure and pathology were studied using whole-organ serial sections. A total of 26 adult human larynges were examined. The findings were as follows: 1. Cricoid areas were located along the superior portion of the cricoid arch on both sides. 2. The cricoid area was surrounded by the perichondrium of the cricoid cartilage, the conus elasticus and the fibrous layer of the subglottic mucosa. 3. The cricoid area was a loose areolar area, mainly composed of adipose tissue and loose elastic and collagenous fibers. 4. Many vessels were present in the cricoid area and a superficial branch of the cricothyroid artery ran through it. 5. Vessels in the cricoid area penetrated the anteroinferior portion of the conus elasticus and extended into the prelaryngeal region. 6. In larynges with laryngeal carcinoma, cancer invasion into the cricoid area and intravascular tumour invasion facilitated metastasis to the prelaryngeal, pretracheal and/or paratracheal regions and stomal recurrence. Cricoid areas were related to the growth pattern of laryngeal cancer.

**Experimental autoimmune labyrinthitis: assessment of molecular size of autoantigens in fractions of inner ear proteins eluted on the Mini Whole Gel Eluter.** Tomiyama, S. Department of Otolaryngology, Nippon Medical School, Tama-Nagayama Hospital, Tokyo, Japan. tomii@nms.ac.jp. *Acta Oto-Laryngologica* (2002) October, Vol. 122 (7), pp. 692–7.

In order to determine the molecular size of the causative autoantigens of experimental autoimmune labyrinthitis, crude inner ear antigen was separated into 14 fractions and the constituent molecules were identified by means of sodium dodecyl sulfate-polyacrylamide gel electrophoresis using the Mini Whole Gel Eluter. The mean total protein recovery was approximately 66 per cent. Sensitization with 55–65 kDa proteins induced the highest number of infiltrating cells among the fractions and sensitization with 38–45 kDa proteins induced the second highest number of inflammatory cells. These results suggest that 38–45 kDa and 55–65 kDa proteins are the causative autoantigens of experimental autoimmune labyrinthitis.

**Steroid perfusion of the inner ear for sudden sensorineural hearing loss after failure of conventional therapy: a pilot study.** Lefebvre, P. P., Staecker, H. Department of Otorhinolaryngology, University of Liege, Liege, Belgium. pp.lefebvre@ulg.ac.be. *Acta Oto-Laryngologica* (2002) October, Vol. 122 (7), pp. 698–702.

The aim of this study was to determine if high-dose delivery of methylprednisolone to the round window can improve hearing after the failure of conventional treatment for sudden sensorineural hearing loss (SSHL). In six patients with SSHL an Intraear microcatheter was placed in the round window niche and methylprednisolone (62.5 mg/ml) was infused at a rate of 10 microl/h for eight to 10 days. Audiometric assessments (including measurement of speech discrimination) were made at presentation, either every day or every other day during treatment and five days after the completion of perfusion. Perfusion of methylprednisolone was beneficial for all six patients, with a 16.25–25 dB improvement in hearing threshold. A dramatic improvement in speech discrimination was also noted in all patients. In conclusion, methylprednisolone perfused at the level of the round window membrane resulted in significant recovery of hearing function after the failure of standard treatment of SSHL.

**Air-exposed tissue culture of human middle ear epithelium and meatal epidermis: a method to study the advancing front of cholesteatoma.** Albers-op-t-Hof, B. M., Peek, F. A. W., Huisman, M. A., Grote, J. J. Ear, Nose Throat Department, Leiden University Medical Center, Leiden, The Netherlands. *Acta Oto-Laryngologica* (2002) October, Vol. 122 (7), pp. 720–5.

The suitability of an air-exposed culture model consisting of a collagen matrix was investigated for constructing an advancing front (AF) of human middle ear epithelium (MEE) and meatal epidermis (ME). Three different culture settings were used: (i) MEE; (ii) ME; and (iii) AF (MEE + ME). Small tissue biopsies were placed on a fibroblast-populated collagen matrix and grown at the air-liquid interface. After three weeks of culture, the MEE and ME outgrowth was differentiated. Light, scanning electron and transmission electron microscopy showed no visible differences compared to native MEE and ME. Cytokeratin 8 and cytokeratin 10 expressions were comparable to the expression seen in the native MEE and ME tissues. Proliferation, which was demonstrated by the expression of Ki-67, was present in the basal layers of cultured MEE and ME. A double layer of cells in which the ME covered the MEE formed the AF. In the AF, the MEE and ME showed the same morphological and immunohistochemical characteristics as in their native tissues. The results of the study show that this in vitro system is a well-defined model system offering the possibility to study the effects of external stimuli on the different epithelia of the AF involved in the pathogenesis of cholesteatoma.

**Uvulopalatopharyngoplasty versus laser uvulopalatoplasty: prospective long-term follow-up of self-reported symptoms.** Lysdahl, M., Haraldsson, P. O. Division of Anaesthesia and Intensive Care, Respiratory Unit, Danderyd Hospital, Stockholm, Sweden. michael.lysdahl@ane.ds.sll.se. *Acta Oto-Laryngologica* (2002) October, Vol. 122 (7), pp. 752–7.

No study to date has prospectively compared the results of uvulopalatopharyngoplasty (UPPP) and CO<sub>2</sub> laser palatal surgery. This study investigates and compares outcomes in 121 consecutive patients suffering from rhonchopathy, the majority of whom reported apneas. Sixty-one patients underwent UPPP and 60 laser uvulopalatoplasty (LUPP). Patients were requested to assess the frequency of symptoms associated with obstructive sleep apnoea syndrome prior to surgery, at three month follow-up and five to eight years post-operatively. All symptoms were significantly improved for the two patient groups, both short and long term ( $p$  0.01) although short-term results were generally better. However, UPPP was superior to LUPP in terms of all clinical effect parameters. Although patients treated with UPPP had more severe symptoms preoperatively they also had a better long-term outcome. Side-effects such as minor swallowing disturbances were frequent, using either surgical modality, but few patients were bothered if surgery was successful.

**Effect of meteorological parameters on acute laryngitis in adults.** Danielides, V., Nousia, C. S., Patrikakos, G., Bartzokas, A., Lolis, C. J., Milionis, H. J., Skevas, A. Department of Otorhinolaryngology, Medical School, University of Ioannina, Greece.

vdanielidis@hotmail.com. *Acta Oto-Laryngologica* (2002) September, Vol. 122 (6), pp. 655–60.

The aim of this study was to investigate the influence of weather conditions on the frequency of acute laryngitis in adults. The medical records of 825 patients with a diagnosis of acute laryngitis obtained over a five-year period were reviewed. Meteorological data reviewed included the daily values of 13 parameters. The monthly distribution of the disease was assessed. In addition, a detailed two-part statistical analysis was performed as follows: (i) the relationship between each meteorological parameter and the frequency of the disease was investigated, using contingency tables; and (ii) the 1825 day period was divided into eight groups characterized by similar weather, using factor and cluster analysis, and the disease frequency in each group was assessed. Our observations were as follows: 1. Meteorological parameters, such as low temperature, low diurnal temperature range, low atmospheric pressure and low mean water vapour pressure, were associated with an increased occurrence of acute laryngitis. 2. Significant changes in maximum temperature or a significant drop in atmospheric pressure, as compared to the previous day's conditions, favoured new cases of the disease. 3. The cold period of the year was associated with an almost two-fold increase in the frequency of disease cases, which peaked in March and reaching a minimum during August. 4. The peak frequency of cases was associated with winter weather conditions, which were characterized by high humidity readings. In conclusion, meteorological parameters, and their variation and covariation, are strongly associated with acute laryngitis in adults.

**Secondary shunt procedure for alaryngeal patients in an outpatient clinic.** Iwai, H., Yukawa, H., Yamamoto, T., Miyamoto, S., Adachi, M., Horiguchi, A., Tomoda, K., Yamashita, T. iwai@ta-kii.kmu.ac.jp. *Acta Oto-Laryngologica* (2002) September, Vol. 122 (6), pp. 611–4.

The shunt procedure used for laryngectomized patients undergoing secondary tracheo-oesophageal (T-E) puncture is inconvenient and causes stress to the patient. In order to overcome these problems we developed a novel surgical T-E shunt technique using the Groningen voice prosthesis that does not require oesophagoscopy or general anaesthesia and can be performed in an outpatient clinic. In this procedure, a shunt is created using a pair of nasal forceps with the patient seated. An endoscope with biopsy forceps is used to insert the Groningen voice prosthesis. The procedure is usually completed within 20 min after inducing local anaesthesia. Neither the technique itself nor the time taken to complete the procedure differed for T-E and tracheo-neoesophageal (reconstructed with flap) shunting. We believe that this procedure is suitable for patients who are afraid of esophagoscopy and/or are not considered suitable candidates for esophagoscopy and repeated general anaesthesia. The procedure is also beneficial for both patients and surgeons with regard to its duration and the cost-effectiveness of treatment.

**Advances in allergy management.** Van Cauwenberge, P. Department of Otorhinolaryngology, University of Ghent, ENT Department, Ghent, Belgium. *Allergy* (2002), Vol. 57 Suppl 75, pp. 29–36.

Our understanding of the pathophysiology of allergy has moved to the molecular level, while study of epidemiology and genetics has revealed risks of developing allergies based on environmental and genetic profiles and pharmaco-economic data have enabled accurate measurement of the immense burden of allergic disease. These advances in allergy research have affected its management, particularly the search for new anti-allergy therapies. New therapies should intervene in the systemic allergy inflammatory cascade and provide clinical efficacy that extends to multiple allergic disease states. In addition, these new therapies should present no additional safety issues, offer improvements over existing therapies, and have an impact on disease-impaired quality of life. In vitro studies show that desloratadine, a new, once-daily, non-sedating, selective histamine H<sub>1</sub>-receptor antagonist, blocks the systemic allergy cascade at multiple points. Desloratadine 5 mg once daily relieves the symptoms of chronic idiopathic urticaria and of both seasonal (SAR) and perennial allergic rhinitis. In patients with concomitant asthma and SAR, asthma symptoms are relieved and beta<sub>2</sub>-agonist medication use is decreased by desloratadine. Unlike many other second-generation histamine H<sub>1</sub>-receptor antagonists, desloratadine provides the added benefit

of efficacy against nasal obstruction in SAR. Desloratadine improves quality of life by decreasing the impact of allergic symptoms on sleep and on daily activities.

**Office-based videoendoscopy for the hypopharynx and cervical esophagus.** Sato, K., Nakashima, T. Department of Otolaryngology-Head and Neck Surgery, Kurume University, School of Medicine, 67 Asahi-machi, Kurume 830-0011, Japan. *American Journal of Otolaryngology* (2002) November-December, Vol. 23 (6), pp. 241-4.

We have manufactured a trial videoendoscope for the hypopharynx and cervical esophagus in cooperation with Asahi Optical Co. Ltd., Tokyo, Japan. In this paper we report on the clinical trial of this new and useful videoendoscope. The videoendoscope has small charge-coupled device (CCD) chip built into the tip of this endoscope and is equipped with a transparent hood at the tip, which allows observation and treatment of the hypopharynx and cervical esophagus. The outer diameters of the hood (7.5 mm) and the insertion tube (5.1 mm) of the videoendoscope are relatively small, and the diameter of the instrumental channel is 2 mm. The videoendoscope system is compact. Compared with conventional flexible fiberoptic and rigid endoscopy, this videoendoscope has several clear advantages. It presents a clear dynamic colour image on a colour video monitor and provides excellent resolution and recording, thus yielding a high diagnostic accuracy. The diameter of the videoendoscope is relatively small and results in less discomfort for patients. Patients can be examined in a sitting position on a procedure chair at an ENT outpatient clinic, which obviates general anaesthesia. The endoscope can be used not only for observation but also for examination and treatment, including biopsy and foreign body extraction. This new endoscope thus widens the indications for office-based endoscopy of the hypopharynx and cervical esophagus.

**Adult laryngomalacia: an uncommon clinical entity.** Gessler, E. M., Simko, E. J., Greinwald, J. H. Jr. Department of Otolaryngology, Head and Neck Surgery, Naval Medical Center Portsmouth, 27 Effingham Street, Portsmouth, VA 23708, USA. *American Journal of Otolaryngology* (2002) November-December, Vol. 23 (6), pp. 386-9.

A 27-year-old female presented with a several day history of acute onset inspiratory stridor and shortness of breath that worsened with phonation and minimal exertion. Flexible fiberoptic direct laryngoscopy revealed prolapse of the mucosa overlying the arytenoid cartilages bilaterally, consistent with type 1 laryngomalacia. These symptoms persisted with only minimal improvement despite administration of short-term corticosteroids, several weeks of antireflux medications and other conservative measures. The patient underwent a supraglottoplasty and exhibited a marked improvement in her symptoms. The literature describes several cases of exercise-induced laryngomalacia in both pediatric and adult populations in which symptoms of inspiratory stridor and shortness of breath are induced by exercise but resolve upon its discontinuation. Adult laryngomalacia appears to be a clinical entity distinct from exercise-induced laryngomalacia because symptoms fail to resolve after several weeks of medical therapy and discontinuation of exertional activity. This case suggests that adult laryngomalacia, unlike pediatric and exercise-induced laryngomalacia, is less likely to resolve over time with conservative management and may require surgical intervention with supraglottoplasty necessary to alleviate symptoms.

**A comparison of total intravenous with balanced anaesthesia for middle ear surgery: effects on postoperative nausea and vomiting, pain, and conditions of surgery.** Mukherjee, K., Seavell, C., Rawlings, E., Weiss, A. Medway Maritime Hospital, Gillingham, UK. *Anaesthesia* (2003) February, Vol. 58 (2), pp. 176-80.

We compared postoperative nausea and vomiting (PONV), pain and conditions for surgery in patients scheduled for middle ear surgery. In a double-blind study, 100 patients were randomly allocated to receive either balanced anaesthesia (group A) using fentanyl, propofol and isoflurane, or total intravenous anaesthesia (group B) using propofol and remifentanyl infusions. Pain scores, nausea/vomiting scores, conditions for surgery and analgesic requirements were recorded for 18 h post operatively. In the recovery ward, patients in group B suffered significantly less PONV ( $p = 0.026$ ) with a reduced requirement for anti-emetic medication ( $p = 0.023$ ); however, this difference was not main-

tained on the ward. The overall incidence of PONV was 34 per cent and 17 per cent in groups A and B, respectively. Initial pain scores were higher in group B in the recovery ward ( $p = 0.003$ ) and patients required more morphine administration ( $p = 0.002$ ); however, pain scores were similar on the ward. Conditions for surgery were found to be better in group B.

**What is the minimum training required for successful cricothyroidotomy?: a study in mannequins.** Wong, D. T., Prabhu, A. J., Coloma, M., Imasogie, N., Chung, F. F. Department of Anesthesiology, Toronto Western Hospital, University of Toronto, Ontario, Canada. david.wong@uhn.on.ca. *Anesthesiology* (2003) February, Vol. 98 (2), pp. 349-53.

**BACKGROUND:** A correctly performed cricothyroidotomy may be lifesaving in a cannot-ventilate, cannot-intubate situation. However, many practicing anesthesiologists do not have experience with cricothyroidotomy. The purpose of this study was to determine the minimum training required to perform cricothyroidotomy in 40 s or less in mannequins. **METHODS:** After informed consent, participants were shown a demonstration video and asked to perform 10 consecutive cricothyroidotomy procedures on a mannequin using a preassembled percutaneous dilational cricothyroidotomy set. Each attempt was timed from skin palpation to lung insufflation. Cricothyroidotomy was considered successful if it was performed in 40 s or less, and the cricothyroidotomy time was considered to have plateaued when there were no significant reductions in cricothyroidotomy times in three consecutive attempts. **RESULTS:** One hundred two anesthesiologists participated in the study. There was a significant reduction of cricothyroidotomy times over the 10 attempts ( $p < 0.0001$ ) and between three consecutive attempts until the fourth attempt ( $p < 0.03$ ). The cricothyroidotomy times plateaued by the fourth attempt, while the success rate plateaued at the fifth attempt (94, 96, 96 and 96 per cent at the fourth, fifth, sixth and seventh attempts, respectively). **CONCLUSION:** Practice on mannequins leads to reductions in cricothyroidotomy times and improvement in success rates. By the fifth attempt, 96 per cent of participants were able to successfully perform the cricothyroidotomy in 40 s or less. While clinical correlates are now known, the authors recommend that providers of emergency airway management be trained on mannequins for at least five attempts or until their cricothyroidotomy time is 40 s or less. The most appropriate retraining intervals have yet to be determined for optimal cricothyroidotomy skill retention.

**Transient suppression of tinnitus by transcranial magnetic stimulation.** Plewnia, C., Bartels, M., Gerloff, C. Department of Psychiatry, Neurophysiology Section, University of Tuebingen, Germany. christian.gerloff@uni-tuebingen.de. *Annals of Neurology* (2003) February, Vol. 53 (2), pp. 263-6.

It has been proposed that tinnitus is associated with an irregular activation of the temporoparietal cortex. If this activity is a functionally relevant component of the tinnitus-related network, a virtual temporary lesion of this area should result in transient reduction of tinnitus. To test this hypothesis, we applied 10 Hz repetitive transcranial magnetic stimulation to eight scalp and four control positions in 14 patients with chronic tinnitus. Stimulation of left temporoparietal cortex significantly reduced tinnitus (Friedman analysis of variance,  $p < 0.05$ ; compared with control), indicating that secondary auditory areas can be critical for tinnitus perception, perhaps as a consequence of maladaptive cortical reorganization.

**Correction of auricular deformity caused by high ear-piercing: case report.** Iida, N., Hosaka, Y., Ogawa, T. Department of Plastic and Reconstructive Surgery, Akita Red Cross Hospital, Kamikitate, Akita, Japan. *Annals of Plastic Surgery* (2003) January, Vol. 50 (1), pp. 82-4.

In recent years, high ear-piercing and wearing earrings in the cartilaginous region of the auricle have become popular. The frequent occurrence of subsequent complications also has been pointed out. The present case is of a 17-year-old girl with an auricular deformity caused by infections occurring after piercing in the scapha. The authors performed an auriculoplasty by excision of the deformed cartilage and autologous cartilage graft from the ipsilateral concha. At present, one year and five months after the operation, no sign of reconstruction is noted, and the auricle remains in a gratifying shape.

**Incidence of and risk factors for additional tympanostomy tube insertion in children.** Boston, M., McCook, J., Burke, B., Derkay, C. Department of Otolaryngology–Head and Neck Surgery, Eastern Virginia Medical School, Norfolk 23507, USA. *Archives of Otolaryngology–Head and Neck Surgery* (2003) March, Vol. 129 (3), pp. 293–6.

**OBJECTIVE:** To determine the incidence and risk factors that account for additional tympanostomy tube placement among children who have undergone an initial placement of ventilation tubes. **DESIGN:** Retrospective case review of consecutive patients. **SETTING:** A tertiary care pediatric hospital. **PATIENTS:** Five-year consecutive series of 2121 children cared for in a hospital-based, tertiary care pediatric otolaryngology practice. **INTERVENTION:** Subsequent need for additional ventilation tube surgery. **RESULTS:** Four hundred twenty-three (19.9 per cent) of the 2121 children who underwent initial placement of bilateral myringotomy tubes (BMTs) between April 20, 1995, and May 25, 1998, subsequently had a second set of tubes placed by May 25, 2000. Children 18 months or younger at the time of initial BMT placement were nearly twice as likely (26.3 per cent vs 15.9 per cent) to undergo a second BMT procedure when compared with children who were older than 18 months at initial surgery ( $p < .005$ ). The probability of having a second BMT procedure was reduced if adenoidectomy was performed at the first BMT procedure (0.08 vs 0.24,  $p < .001$ ). Adenoidectomy status, craniofacial deformities, and a family history of adenoidectomy or tonsillectomy with or without BMTs were independent risk factors for multiple BMTs. **CONCLUSIONS:** Epidemiologic analysis of this consecutive series of patients who underwent BMT placement in a tertiary care pediatric otolaryngology practice suggests that one in five patients will subsequently require a second set of ventilation tubes. Age younger than 18 months at the time of the initial BMT procedure is associated with an increased risk for additional surgery but is not an independent risk factor. Adenoidectomy reduces the incidence of subsequent BMTs following initial surgery.

**Outpatient weekly neoadjuvant chemotherapy followed by radiotherapy for advanced nasopharyngeal carcinoma: high complete response and low toxicity rates.** Lin, J. C., Jan, J. S., Hsu, C. Y., Jiang, R. S., Wang, W. Y. Department of Radiation Oncology, Taichung Veterans General Hospital, Taiwan. *British Journal of Cancer* (2003) January 27, Vol. 88 (2), pp. 187–94.

Nasopharyngeal carcinoma (NPC) is a radiosensitive and chemosensitive tumour. The aim of this prospective study is to evaluate the toxicity and efficacy of an outpatient weekly neoadjuvant chemotherapy (NeoCT) plus radiotherapy for advanced NPC. From November 1998 to August 2001, 90 NPC patients meeting the following criteria were treated: (1) neck node  $>6$  cm; (2) supraclavicular node metastasis; (3) skull base destruction/intracranial invasion plus multiple nodes metastasis; (4) multiple neck nodes metastasis with one of nodal size  $>4$  cm; or (5) elevated serum LDH level. The NeoCT consists of cisplatin 60 mg  $m^{-2}$ , alternating with 5-fluorouracil 2500 mg  $m^{-2}$  plus leucovorin 250 mg  $m^{-2}$  (P-FL) by an outpatient weekly schedule for a total of 10 weeks. Local radiotherapy  $>$  or = 70 Gy by conventional fractionation was delivered within one week after NeoCT. Patient compliance was rather good. Grade 3–4 toxicity of NeoCT included leucopenia (7.8 per cent), anaemia (18.9 per cent), thrombocytopenia (3.3 per cent), nausea/vomiting (4.4 per cent), and weight loss (1.1 per cent). Response evaluated after NeoCT showed 73.3 per cent complete response (CR) rate of primary tumour, 71.1 per cent CR rate of neck nodes, and an overall CR rate of 57.8 per cent. In all, 88 out of 90 patients received rebiopsy of primary tumour and 55 patients (62.5 per cent) revealed pathological CR. After a median follow-up time of 24 months, one persistent disease and 18 relapses were noted. The two-year nasopharynx disease-free, neck disease-free, distant disease-free, overall, and progression-free survival rates are 98.9, 95.9, 80.0, 92.1 and 77.5 per cent, respectively. Preliminary data of the current study show that P-FL NeoCT plus radiotherapy is a low toxic regimen with promising results on very advanced NPC patients and merits to be investigated in phase III trials.

**Head and neck oncology: the UK experience. Who is publishing what?** Ismail, Y., McLean, N. R., Kelly, C. G. Department of General Surgery, Frenchay Hospital, Bristol, UK. *British Journal*

*of Plastic Surgery* (2002) October, Vol. 55 (7), pp. 570–3.

Using the MEDLINE database (OVID), a retrospective review of the UK literature on head and neck oncology was performed for the period 1994–2000, each publication being categorised by department and first author. Tumours almost exclusively managed by general surgeons, cardiothoracic surgeons and neurosurgeons were excluded. In the years 1994 to 2000, there were a total of 120 UK publications, 72 per cent of which came from non-academic NHS units; 23 per cent of the publications were from ENT units, 23 per cent from oral and maxillofacial (OMF) surgery units and 18 per cent from plastic surgery units. The majority of plastic surgery publications described reconstructive techniques, whereas a wider range of topics was observed in the publications by ENT and OMP surgeons. Several irregularities in the MIDLINE database were discovered and are discussed. The findings of this study may be relevant to the future planning of head and neck oncology services.

**Characterization of laryngopharyngeal reflux in patients with premalignant or early carcinomas of the larynx.** Lewin, J. S., Gillenwater, A. N., Garrett, J. D., Bishop, L. J. K., Nguyen, D. D., Callender, D. L., Ayers, G. D., Myers, J. N. Department of Head and Neck Surgery, The University of Texas MD Anderson Cancer Center, Houston, Texas 77030-1515, USA. *Journal of Laryngology and Voice* (2003) February 15, Vol. 97 (4), pp. 1010–4.

**BACKGROUND:** An association between laryngopharyngeal reflux (LPR) and laryngeal carcinoma has been suggested, but remains unproven. The current pilot study was performed to determine the incidence of LPR among patients with early laryngeal carcinomas or dysplasia and to examine the associations between levels of LPR and histologic stage, smoking status, the symptom of heartburn, and body position during reflux episodes. **METHODS:** Behavioural and 24 hour pH monitoring data were prospectively acquired and analysed for 40 previously untreated adults with dysplasia, T1 or T2 laryngeal carcinomas. **RESULTS:** Eighty-five per cent of patients had LPR. No significant association was shown between the level of LPR and histologic stage or smoking status. Heartburn did not predict LPR. The incidence of LPR in the upright body position was 91 per cent, compared with nine per cent in the supine position, among patients with LPR. **CONCLUSIONS:** When compared to available normative data, the current findings show a high incidence of LPR in patients with premalignant and early laryngeal cancer. These findings highlight the need for a matched-control study evaluating LPR as a potential predisposing factor for laryngeal carcinoma.

**Acute renal failure and hearing loss due to sodium bromate poisoning: a case report and review of the literature.** Sashiyama, H., Irie, Y., Ohtake, Y., Nakajima, K., Yoshida, H., Sakai, T., Okuda, K. San-ai Memorial Hospital, Chiba, Japan. *Clinical Nephrology* (2002) December, Vol. 58 (6), pp. 455–7.

Acute renal failure with hearing loss due to sodium bromate intoxication is described. A 48-year-old woman who ingested permanent wave neutralizer in a suicide attempt and developed anuria was admitted to our hospital for hemodialysis. Bromate intoxication was suspected and hemodialysis was carried out; she required maintenance dialysis three times a week. Irreversible severe sensorineural hearing loss continued and peripheral polyneuropathy developed in the lower limbs. We measured the concentration of bromine in the serum before and after the first hemodialysis and found its removal rate to be 61.3 per cent. This is the first report that proved the utility of hemodialysis for bromate intoxication in a clinical setting.

**A randomized double-blind study to compare the effects of nasal fluticasone and betamethasone on the hypothalamo-pituitary-adrenal axis and bone turnover in patients with nasal polyposis.** Fowler, P. D., Gazis, A. G., Page, S. R., Jones, N. S. University Hospital, Queen's Medical Centre, Nottingham, UK. *Journal of Laryngology and Voice* (2002) December, Vol. 27 (6), pp. 489–93.

Treatment of nasal polyposis with topical betamethasone is associated with suppression of the hypothalamo-pituitary-adrenal (HPA) axis and, potentially, has adverse effects on bone turnover. Fluticasone propionate is a potent corticosteroid with negligible absorption across the nasal mucosa and extensive first-pass hepatic

metabolism. We performed a randomized double-blind study, in patients with nasal polyposis, comparing the effects of eight weeks' treatment with betamethasone drops or fluticasone nasules on the HPA axis using the one micro g tetracosactide test, and on bone turnover using two serum markers. Nine patients were allocated to each treatment. Betamethasone resulted in significant suppression in the tetracosactide test ( $p=0.006$ ), but fluticasone did not ( $p=0.113$ ). There were no differences in bone turnover or treatment efficacy between treatments. Treatment of nasal polyposis with topical betamethasone drops, but not with fluticasone nasules, suppresses the HPA axis and, given comparable efficacy, fluticasone administered via nasule should be the preferred agent.

**Sequelae of otitis media with effusion among children with cleft lip and/or cleft palate.** Sheahan, P., Blayney, A. W., Sheahan, J. N., Earley, M. J. Department of Otolaryngology, The Children's Hospital, Temple Street, Dublin, Ireland. sheahanp@eircom.net. *Clinical Otolaryngology and Allied Sciences* (2002) December, Vol. 27 (6), pp. 494–500.

Otitis media with effusion (OME) is common among children with cleft palate, and may lead to such long-term consequences as hearing loss, tympanic membrane retraction, and chronic otitis media (COM). In total, 104 children with cleft lip and/or palate treated for OME at our institution were reviewed. Mean duration of follow-up was 6.9 years, and mean age at latest follow-up was 9.6 years. The incidence of COM was 19 per cent, and the incidence of cholesteatoma was 1.9 per cent. Ears showing such long-term sequelae of OME as hearing loss, tympanic membrane retraction, and chronic otitis media, were noted to have undergone a significantly greater number of ventilation tube insertions than

ears not showing these sequelae. Our findings would suggest that a conservative approach to the management of OME in children with cleft palate is more likely to be beneficial in the long term.

**Facial migraine in a rhinological setting.** Daudia, A. T., Jones, N. S. Department of Otorhinolaryngology, Head and Neck Surgery, University of Nottingham, Nottingham, UK. *Clinical Otolaryngology and Allied Sciences* (2002) December, Vol. 27 (6), pp. 521–5. This study aims to investigate the incidence of migraine involving the face in a rhinology clinic and to describe its characteristics. It is a study of a cohort of 973 patients consecutively presenting to the outpatient clinic with symptoms of facial pain and/or rhinosinusitis. The study subgroup consisted of patients with facial pain and migraine excluding cluster headache and paroxysmal hemicrania. We studied the features of 151 patients who had facial pain with migraine. The diagnosis was based on the criteria used by the International Headache Society and was also supported by the outcome and response to treatment after a mean of two years and two months. Of the 973 consecutive patients, 409 (42 per cent) had symptoms of facial pain and/or head pain or pressure. Fifty-one (12 per cent) had migraine. Of these, 39 (76 per cent) had unilateral pain and, in 12 (24 per cent), it was bilateral. The distribution affected the forehead and/or eye or cheek in 32 (63 per cent) patients. Twenty-four (47 per cent) had migraine isolated to the second division of the trigeminal nerve. Twelve per cent of patients attending a rhinology clinic with facial pain had migraine. Of particular interest were the six per cent of patients with facial pain who had migraine confined to the second division of the trigeminal nerve. This entity is not widely recognized and has rarely been described in the literature.