

## Abstract Selection

**Teratocarcinoma of the paranasal sinuses: a clinicopathologic and immunohistochemical study.** Pai, S. A., Naresh, K. N., Masih, K., Ramarao, C., Borges, A. M. Department of Pathology, Tata Memorial Hospital, Mumbai (Bombay), India. *Human Pathology* (1998) July, Vol. 29 (7), pp. 718–22.

We report four cases of sinonasal teratocarcinoma (SNTCS), a rare malignant tumour that displays combined features of an immature or malignant teratoma and a carcinosarcoma. The patients, three men and one woman, were all adults ranging in age from 21 to 69 years who presented with nasal obstruction and epistaxis. The tumours were typically composed of round cells and short spindle cells with neuroectodermal/rosette-like structures. Also seen were foci of fetal-like squamous epithelium, glandular epithelium, immature mesenchyme, immature cartilage, and neuronal differentiation. Immunohisto-chemistry performed in three cases showed expression of vimentin, CD99 (MIC2), and neuron-specific enolase in most cells, and focal expression of cytokeratin, epithelial membrane antigen, alpha fetoprotein, glial fibrillary acidic protein, chromogranin, and synaptophysin. The tumours were consistently negative for beta human chorionic gonadotrophin, neurofilament protein, and leukocyte common antigen. The entities considered in the differential diagnosis were poorly differentiated carcinomas, sarcomas, and olfactory neuroblastoma. We suggest that these neoplasms arise from a primitive cell capable of organized divergent differentiation. Author.

**Phonation onset: vocal fold modelling and high-speed glottography.** Mergell, P., Herzel, H., Wittenberg, T., Tigges, M., Eysholdt, U. Department of Phoniatrics and Pedaudiology, University Erlangen-Neuremberg, Germany. mergell@phoni.med.uni-erlangen.de. *Journal for the Acoustical Society of America* (1998) July, Vol. 104 (1), pp. 464–70.

Phonation onset is discussed in the framework of dynamical systems as a Hopf bifurcation, i.e. as a transition from damped to sustained vocal fold oscillations due to changes of parameters defining the underlying laryngeal configuration (e.g. adduction, subglottal pressure, muscular activity). An analytic envelope curve of the oscillation onset is deduced by analyzing the Hopf bifurcation in mathematical models of the vocal folds. It is governed by a single time constant which can be identified with the physiological parameter phonation onset time. This parameter reflects the laryngeal state prior to phonation and can be used as a quantitative classification criterion in order to assess the phonation onset in clinical diagnosis. The extraction of the phonation onset time from simulated time series using a simplified two-mass model and from digital high-speed videos is described in detail. It shows a good agreement between theory and measurement. Author.

**Vocal tract area functions for an adult female speaker based on volumetric imaging.** Story, B. H., Titze, I. R., Hoffman, E. A. WJ Gould Voice Research Center, Denver Center for the Performing Arts, Colorado 80209, USA. *Journal for the Acoustical Society of America* (1998) July, Vol. 104 (1), pp. 471–87.

Magnetic resonance imaging (MRI) was used to acquire vocal tract shapes of ten vowels /i, I, (symbol: see text) a, (symbol: see text), o, (symbol: see text) u/ and two liquid approximants /ʒ (symbol: see text), l/ for a 27-year-old adult female. These images were complemented with additional images acquired with electron beam computed tomography (CT) of /i/ and /a/. Each 3-D shape was condensed into a set of cross-sectional areas of oblique sections perpendicular to the centerline of the vocal tract's long axis, resulting in an 'area function'. Formant frequencies computed for each area function showed reasonable similarity to those determined from the natural (recorded) speech of the imaged subject, but differences suggest that some of the imaged vocal tract shapes were articulated differently during imaging than during recording of natural speech, and also that imaging procedures may have compromised some accuracy for a few shapes. The formant calculations also confirmed the significant effect that the piriform

sinus can have on lowering the formant frequencies. A comparison is made between area functions derived using both MRI and CT methods for the vowels /i/ and /a/. Additionally, the area functions reported in this study are compared with those from two previous studies and demonstrate general similarities in shape but also obvious differences that can be attributed to anatomical differences of the imaged subjects and to differences in imaging techniques and image processing methods. Author.

**Deformation analysis of the vocal folds from videostroboscopic image sequences of the larynx.** Saadah, A. K., Galatsanos, N. P., Bless, D., Ramos, C. A. Department of Electrical and Computer Engineering, Chicago, Illinois 60616, USA. npg@ece.iit.edu. *Journal for the Acoustical Society of America* (1998) June, Vol. 103 (6), pp. 3627–41.

Videostroboscopy is an examination which yields a permanent record of the moving vocal folds. Thus, it allows the diagnosis of abnormalities which contribute to voice disorders. In this paper, in order to find and quantify the deformation of the vocal folds in videostroboscopic recordings, an active contours- (snakes) based approach is used to delineate the vocal folds in each frame of the videostroboscopic image sequence. After this delineation, a new elastic registration algorithm is used to register the vocal fold contours between adjacent frames of the video sequence. This algorithm is based on the regularization principle and is very effective when large deformations are present. A least-squares approach is used to fit an affine model to the displacement vectors found by elastic registration. The parameters of this model, rotation, translation, and deformation along two principle axes, quantify the deformation and allow the succinct characterization of the videostroboscopic recordings based on the deformations that occurred. Experiments are shown with synthetic and real videostroboscopic data that demonstrate the value of the proposed approach. Author.

**Clinical evaluation and surgical management of congenital preauricular fistulas.** Ellies, M., Laskawi, R., Arglebe, C., Altrogge, C. Department of Otorhinolaryngology, University of Göttingen, Germany. *Journal of Oral, Maxillofacial Surgery* (1998) July, Vol. 56 (7), pp. 827–30; discussion 831.

**PURPOSE:** The retrospective investigation evaluated the clinical data on patients with a preauricular fistula with respect to demographic factors, symptoms, preoperative diagnosis, and surgical therapy. Follow-up studies served to critically assess the outcome of the operations. **PATIENTS AND METHODS:** The records of 62 patients were studied. Patients were divided into two groups: those operated on for the first time for a preauricular fistula and those operated on for a recurrence. Controlled follow-up was performed by means of a standardized questionnaire filled out by both the patients' physicians and the patients themselves. **RESULTS:** The mean age of patients operated on for the first time was 16 years, and that of patients operated on for a recurrence was 22 years. Although the overall rate of recurrence was 21 per cent, it differed widely between groups (14 per cent in first operations and 42 per cent in patients operated on for the first time for a recurrence). These figures are within the lower range of the recurrence rates previously reported. Serious side effects, such as persistent damage to the facial nerve, were not observed. **CONCLUSIONS:** Operative management of a preauricular fistula is a treatment with few side effects that should be offered to each patient with such a malformation. Because the first operation is decisive for the further course of the condition, surgery should be performed under optimum conditions to avoid recurrence. Author.

**Association between dental occlusal variables and intraarticular temporomandibular joint disorders: horizontal and vertical overlap.** Kahn, J., Tallents, R. H., Katzberg, R. W., Moss, M. E., Murphy, W. C. University of Rochester, Eastman Dental Center, N.Y., USA. *Journal of Prosthetic Dentistry* (1998) June, Vol. 79 (6),

pp. 658–62.

**STATEMENT OF PROBLEM:** It has been suggested that dental occlusion may play a role in the development of intraarticular temporomandibular joint disorders. **PURPOSE:** This study evaluated the relationship between horizontal and vertical overlap and intraarticular temporomandibular joint disorders. **MATERIAL AND METHODS:** Vertical and horizontal overlap of the anterior teeth of 82 asymptomatic volunteers and 263 symptomatic patients were examined. **RESULTS:** Fifty-five (67 per cent) of the asymptomatic volunteers had normal joints and 27 (33 per cent) had disk displacement. Two hundred and twenty-one patients (84 per cent) had disk displacement and 42 (16 per cent) had bilateral symptomatic normal joints. Horizontal overlap equal to or greater than 4 mm was more prevalent in the symptomatic patient group as compared with the asymptomatic volunteer group ( $p < 0.05$ ). Vertical overlap equal to or greater than 4 mm demonstrated no significant differences. **CONCLUSION:** Horizontal overlap equal to or greater than 4 mm was greater in symptomatic patients with intraarticular temporomandibular joint disorders. Author.

**Modulation of myofascial pain by the reproductive hormones: a preliminary report.** Dao, T. T., Knight, K., Ton-That, V. University of Toronto, Ontario, Canada. *Journal of Prosthetic Dentistry* (1998) June, Vol. 79 (6), pp. 663–70.

**STATEMENT OF PROBLEM:** The predominance of myofascial pain in women in childbearing years suggests that the reproductive hormones may play a role in this pain disorder. **PURPOSE:** The potential influence of these hormones on myofascial pain was evaluated. **METHODS:** Pain patterns were compared across three consecutive menstrual cycles in oral contraceptives users (OC group) and nonusers (Non-OC group). **RESULTS:** Preliminary results showed that within menstrual cycle variability of daily pain was higher than the nonusers group. In addition to their low variation, pain levels of oral contraceptives users remained positive across the hormonal cycle, whereas in nonusers, peaks of pain alternated frequently with pain-free periods. These data suggest that pain levels in oral contraceptives users may be more constant than those of nonusers. **CONCLUSIONS:** This potential hormonal influence on myofascial pain levels among oral contraceptives users may represent one of the various adverse effects induced by oral contraceptives at the trigeminal area in sensitive subjects. Evidence supporting the link between estrogen, nitric oxide, and inflammatory processes is presented. Author.

**A comparison of conservative, radical and laser palatal surgery for snoring.** O'Reilly, B. F., Simpson, D. C. Basildon Hospital, Glasgow, UK. *Journal of the Royal College of Surgery Edinburgh* (1998) June, Vol. 43 (3), pp. 194–5.

Reports of snoring are common among servicemen in the armed forces. Continuous positive airway pressure (CPAP) is usually an inappropriate modality for servicemen, but surgery, although requested, is very painful. In an attempt to reduce the pain, a laser has been used to perform uvulopalatopharyngoplasty and the more conservative uvulopalatoplasty has also been performed. Before proceeding to a randomized trial, this retrospective study was performed by questionnaire comparing these operations with conventional uvulopalatopharyngoplasty. Fifty-two completed replies from 63 patients were analysed. The results have to be interpreted with caution because of the small sample sizes; however, the results in the three groups were similar. The study suggests that each operation works well, but that any reduction in pain from performing uvulopalatoplasty or by using a laser is likely to be small. The study also found that the incidence of dryness as a complication is much higher than previously estimated. Author.

**Resistance pattern of middle ear fluid isolates in acute otitis media recently treated with antibiotics.** Leibovitz, E., Raiz, S., Piglansky, L., Greenberg, D., Yagupsky, P., Fliss, D. M., Leiberman, A., Dagan, R. Pediatric Infectious Disease Unit, Soroka University Medical Center and the Faculty of Health Sciences, Ben-Gurion University of the Negev, Beer-Sheva, Israel. *Pediatric Infectious Diseases Journal* (1998) June, Vol. 17 (6), pp. 463–9.

**BACKGROUND:** Little information is available about the effect of antibiotic treatment on the prevalence and MIC of the subsequently isolated pathogens in cases of acute otitis media (AOM) failing a course of antibiotic therapy. This information is important, particularly regarding the effectiveness of the oral

antibiotics used in children failing initial therapy. **PATIENTS AND METHODS:** One hundred and eighty-one children with culture-positive AOM were prospectively studied between October, 1995, and July, 1996. Sixty-three (35 per cent) patients received various antibiotics for variable periods during the 14 days preceding enrollment. **RESULTS:** A total of 94 *Streptococcus pneumoniae* (Pnc) and 113 *Haemophilus influenzae* (Hi) were isolated. Thirty-eight Pnc and 35 Hi were isolated in the 63 patients with recently treated AOM. Pnc as a single isolate was more prevalent in patients recently treated with antibiotics (27 of 63, 43%) than among those not recently treated (32 of 118, 27 per cent,  $P = 0.047$ ). The MIC<sub>50</sub> values of penicillin, cefaclor and cefuroxime axetil for Pnc were significantly higher in the pneumococci isolated from patients recently treated than among those isolated from patients not recently treated with antibiotics (0.38, 3 and 0.75 microg/ml vs. 0.094, 0.38 and 0.12 microg/ml, respectively). Seventy-nine per cent of Pnc isolates in the recently treated group had MIC for penicillin of  $>0.1$  microg/ml vs. only 47 per cent in those not recently treated ( $p < 0.05$ ). The respective figures for MIC  $>0.5$  microg/ml of cefaclor were 79 per cent vs 41 per cent for the recently treated and not recently treated groups ( $p < 0.001$ ); cefuroxime MIC  $>0.5$  microg/ml was found in 61 and 25 per cent, respectively ( $p = 0.001$ ). **CONCLUSIONS:** Pneumococcus is more prevalent in AOM after a recent antibiotic treatment, and the MIC of the commonly used beta-lactam drugs for Pnc is considerably higher in this setting. In view of our data, the use of oral cephalosporins like cefaclor or cefuroxime as second line drugs in the treatment of unresponsive AOM, particularly in regions where resistant PNC is prevalent, should be reconsidered. Author.

**Intranasally administered immunoglobulin for the prevention of rhinitis in children.** Heikkinen, T., Ruohola, A., Ruuskanen, O., Waris, M., Uhari, M., Hammarstrom, L. Department of Pediatrics, University of Turku, Finland. *Pediatric Infectious Diseases Journal* (1998) May, Vol. 17 (5), pp. 367–72.

**OBJECTIVE:** To determine the efficacy of intranasally administered immunoglobulin in preventing symptoms of rhinitis in children. **METHODS:** Forty children ages one to four years who attended day-care centers in Turku, Finland, were enrolled in the double blind, placebo-controlled study. The children were randomly assigned to receive treatment with immunoglobulin, composed mainly of immunoglobulin A, or placebo, both administered as nasal sprays twice daily for eight weeks. During this medication period and an additional eight-week follow-up period, the parents recorded the symptoms of the children daily in the diaries provided. One child who met an exclusion criterion was withdrawn from the study after a few days of medication. **RESULTS:** During the eight-week medication period the 19 children in the immunoglobulin group had 42 per cent fewer days with rhinitis than the 20 children receiving placebo (mean, 10.8 vs 18.7 days;  $p = 0.004$ ). The total numbers of episodes of rhinitis in the immunoglobulin and placebo groups were 33 and 51, respectively. No significant differences were observed between the groups during the postmedication follow-up period. **CONCLUSIONS:** Intranasal administration of immunoglobulin appears to be an effective method to prevent symptoms of rhinitis in children, and further studies of this approach are needed. Author.

**Reversal of midazolam-induced laryngospasm with flumazenil.** Davis, D. P., Hamilton, R. S., Webster, T. H. Department of Emergency Medicine, University of California at San Diego, USA. [shrimptaco@aol.com](mailto:shrimptaco@aol.com). *Annals of Emergency Medicine* (1998) August, Vol. 32 (2), pp. 263–5.

Midazolam is a commonly used benzodiazepine that is ideal for conscious sedation during a variety of procedures. Laryngospasm is listed by the manufacturer as a rare side effect of midazolam. Flumazenil is a competitive inhibitor of the benzodiazepines that is available for reversal at the end of such a procedure or when too much sedation has been achieved. We present a case of a 61-year-old man who was to undergo conscious sedation before cardioversion. Shortly after receiving midazolam, he developed laryngospasm and resultant respiratory distress; the laryngospasm was reversed by a small dose of flumazenil. The symptoms recurred after approximately 25 minutes and were again reversed with flumazenil. Neither midazolam-induced laryngospasm nor its

reversal with flumazenil have previously been reported. A brief discussion regarding laryngospasm and the use of flumazenil are included. Author.

**Diagnostic pitfalls in sports related laryngeal injury.** Rejali, S. D., Bennett, J. D., Upile, T., Rothera, M. P. Department of ENT Surgery, Salford Royal Hospitals (Hope Hospital), United Kingdom. *British Journal of Sports Medicine* (1998) June, Vol. 32 (2), pp. 180–1.

The serious nature of laryngeal trauma sustained during sporting activity can be easily overlooked. Concomitant injury should not distract from the diagnosis of potential airway problems. The effects of head and neck trauma on the airway may be delayed. The assessment and management of a patient with suspected laryngeal injury should be carried out by experienced medical practitioners. Author.

**Food groups and risk of oral and pharyngeal cancer.** Levi, F., Pasche, C., La Vecchia, C., Lucchini, F., Franceschi, S., Monnier, P. Registre Vaudois des Tumeurs, Institut Universitaire de Medecine Sociale et Preventive, Lausanne, Switzerland. fabio.levi@inst.hospvd.ch. *International Journal of Cancer* (1998) August 31, Vol. 77 (5), pp. 705–9.

The role of specific food groups and diet variety on the risk of oral and pharyngeal cancer has been considered using data from a case-control study conducted between 1992 and 1997 in the Swiss Canton of Vaud. Cases were 156 patients (126 males, 30 females) aged under 75 (median age 56) years with incident, histologically confirmed cancer of the oral cavity and pharynx, and controls were 284 subjects (246 males, 38 females, median age 57 years), admitted to the same university hospital for a wide spectrum of acute, non-neoplastic conditions unrelated to tobacco and alcohol consumption or to long-term modification of diet. After allowance for education, alcohol, tobacco and total energy intake, significant trends of increasing risk with more frequent intake emerged for eggs (OR = 2.3 for the highest tertile), red meat (OR = 2.1) and pork and processed meat (OR = 3.2). Inverse trends in risk were observed for milk (OR = 0.4 for the highest tertile), fish (OR = 0.5), raw vegetables (OR = 0.3), cooked vegetables (OR = 0.1), citrus fruit (OR = 0.4) and other fruits (OR = 0.2). The addition of a serving per day of fruit or vegetables was associated with an about 50 per cent reduction in oral cancer risk. The most favourable diet for oral cancer risk is therefore given by infrequent consumption of red and processed meat and eggs and, most of all, frequent vegetable and fruit intake. Diet diversity was inversely related to oral and pharyngeal cancer: ORs were 0.35 for the highest tertile of total diversity, 0.24 for vegetable and 0.34 for fruit diversity. In terms of attributable risk, high meat intake accounted for 49 per cent of oral and pharyngeal cancers in this population, low vegetable intake for 65 per cent and low fruit intake for 54 per cent. Author.

**Genotype/phenotype correlations in type 2 neurofibromatosis (NF2): evidence for more severe disease associated with truncating mutations.** Evans, D. G., Trueman, L., Wallace, A., Collins, S., Strachan, T. Department of Medical Genetics, St Mary's Hospital, Manchester, UK. *Journal of Medical Genetics* (1998) June, Vol. 35 (6), pp. 450–5.

Blood samples from 125 unrelated families with classical type 2 neurofibromatosis (NF2) with bilateral vestibular schwannomas have been analysed for mutations in the NF2 gene. A further 17 families fulfilling modified criteria for NF2 have also been analysed. Causative mutations have been identified in 54 (43 per cent) classical families and six (35 per cent) of those fulfilling modified criteria. Forty-two cases from 38 families with truncating mutations had an average age at onset of symptoms of 19 years and diagnosis at 22.4 years. Fifty-one cases from 16 families with splice site mutations (15 from six), missense mutations (18 from six), and large deletions (18 from five) had an average age of onset of 27.8 years and at diagnosis of 33.4 years. Subjects with truncating mutations were significantly more likely to have symptoms before 20 years of age ( $p < 0.001$ ) and to develop at least two symptomatic CNS tumours in addition to vestibular schwannoma before 30 years ( $p < 0.001$ ). There were also significantly fewer multigenerational families with truncating mutations. Four further truncating mutations were in mosaic form and were associated with milder diseases than other similar mutations. This large study has confirmed the previous impression

that truncating mutations are associated with severe disease, but caution has to be exercised in using mutation type to predict disease course. Author.

**Mucoepidermoid carcinoma of the larynx: a case which responded completely to radiotherapy and a review of the literature.** Shonai, T., Hareyama, M., Sakata, K., Oouchi, A., Nagakura, H., Koito, K., Morita, K., Satoh, M., Asakura, K., Kataura, A., Hinoda, Y. Department of Radiology, Sapporo Medical University, School of Medicine, Japan. *Japanese Journal of Clinical Oncology* (1998) May, Vol. 28 (5), pp. 339–42.

Most laryngeal cancers are squamous cell carcinomas, and adenocarcinomas account for <one per cent of cancers of the larynx. Among them, mucoepidermoid carcinoma is extremely rare and there is little agreement about the treatment of this carcinoma. We encountered one patient with mucoepidermoid carcinoma of the bilateral vocal cords (T1bN0M0, Stage 1). For this, most investigators recommended a surgical procedure. However, because of his old age, the early stage and low grade of histopathology, we treated this patient with radiotherapy alone, delivered by accelerated hyperfractionation, which is a more effective strategy for treating radioresistant tumours than conventional irradiation. Following radiotherapy, the tumour disappeared and the patient has been alive and well for more than six years. An old patient with mucoepidermoid carcinoma of the larynx was successfully treated with radiotherapy alone. Author.

**A comparison of nebulized budesonide, intramuscular dexamethasone, and placebo for moderately severe croup (see comments).** Johnson, D. W., Jacobson, S., Edney, P. C., Hadfield, P., Mundy, M. E., Schuh, S. Department of Paediatrics, University of Calgary, Alberta Children's Hospital, Canada. *New England Journal of Medicine* (1998) August 20, Vol. 339 (8), pp. 498–503. Comment in *New England Journal of Medicine* (1998) August 20, 339 (8): 553–5.

**BACKGROUND:** In children with croup, treatment with nebulized budesonide decreases symptoms, but it is uncertain how budesonide compares with dexamethasone, the conventional therapy for croup, and whether either reduces the rate of hospitalization. **METHODS:** We performed a double-blind, randomized trial involving 144 children with moderately severe croup. The children were treated with racementhine and a single dose of 4 mg of nebulized budesonide (48 children), 0.6 mg of intramuscular dexamethasone per kilogram of body weight (47 children), or placebo (49 children). The children were assessed before treatment and then hourly for five hours after treatment. Physicians who were unaware of the treatment assignments determined the children's need for further treatment and hospitalization. **RESULTS:** The characteristics of the groups were similar at base line, including the types of viruses identified, the types of croup, and the clinical severity of the illness. The overall rates of hospitalization were 71 per cent in the placebo group (35 of 49 children), 38 per cent in the budesonide group (18 of 48 children), and 23 per cent in the dexamethasone group (11 of 47 children) (unadjusted  $p = 0.001$  for the comparison of budesonide with placebo,  $p < 0.001$  for the comparison of dexamethasone with placebo, and  $p = 0.18$  for the comparison of budesonide with dexamethasone). Children treated with budesonide or dexamethasone had a greater improvement in croup scores than those given placebo ( $p = 0.03$  and  $p < 0.001$ , respectively), and those treated with dexamethasone had a greater improvement than those treated with budesonide ( $p = 0.003$ ). **CONCLUSIONS:** In children with moderately severe croup, treatment with intramuscular dexamethasone or nebulized budesonide resulted in more rapid clinical improvement than did the administration of placebo, with dexamethasone offering the greatest improvement. Treatment with either glucocorticoid resulted in fewer hospitalizations. Author.

**Speech intelligibility in noise with fast compression hearing aids.** Vershuure, J., Benning, F. J., Van Cappellen, M., Dreschler, W. A., Boeremans, P. P. Audiological Centre, ENT Department, Erasmus University Rotterdam, The Netherlands. *Audiology* (1998) May–June, Vol. 37 (3), pp. 127–50.

The effect of fast (syllabic) compression with overshoot reduction was studied in moderately hearing-impaired and in severely hearing-impaired listeners in quiet and in noisy situations. A test battery of daily masking noises was selected using multidimen-



sional scaling techniques. Four relevant noises were selected: a multi-talker babble, the noise in an industrial plant, in a printing office and a city-noise background. The speech measurements show that only selected patients benefit from syllabic compression, i.e. listeners with a poor speech discrimination score. The effect in noisy surroundings was tested at the critical signal-to-noise ratio of each patient, showing whether they benefited from compression in the most critical condition or not. It turns out that the effect depends largely on the speech discrimination score and the modulation of the noise signal. When the speech discrimination score is good, compression tends to impair the results. When the speech discrimination score is poor, compression helps if the noise is modulated. Author.

**Inhibition of mediator release from dispersed nasal polyp cells by cyclosporin A.** Lebel, B., Crampette, L., Vergnes, C., Campbell, A. M., Bousquet, J. Montpellier-Asthme and INSERM U 454, Hopital Arnaud de Villeneuve, Centre Hospitalier Universitaire, Montpellier, France. *International Archives for Allergy and Immunology* (1998) August, Vol. 116 (4), pp. 284–7.

The mechanisms of action of cyclosporin A require further elucidation since this drug includes anti-inflammatory properties unrelated to its previously documented effect of T cells. A study was performed using enzymatically dispersed cells from nasal polyps of seven subjects to examine the effects of cyclosporin A on the release of histamine, leukotriene C<sub>4</sub>/D<sub>4</sub> (LTC<sub>4</sub>/D<sub>4</sub>) and thromboxane (TxB<sub>2</sub>) following stimulation by anti-IgE. Cells were resuspended and preincubated with cyclosporin A (0.1, 1 and 10 microM) or 0.1 per cent DMSO (the vehicle used to dissolve cyclosporin A) for 20 min prior to challenge with 10 microgram/ml epsilon-chain-specific anti-IgE for 45 min at 37 degrees C. Histamine, LTC<sub>4</sub>/D<sub>4</sub> and TxB<sub>2</sub> were measured using EIA. Cyclosporin A significantly inhibited the release of histamine, LTC<sub>4</sub>/D<sub>4</sub>, and TxB<sub>2</sub> in a concentration-dependent manner. IC<sub>50</sub> values, histamine (5.1 microM), LTC<sub>4</sub>/D<sub>4</sub> (7.8 microM) and TxB<sub>2</sub> (6.2 microM), were determined. These data demonstrate new antiallergic properties of cyclosporin A using a novel in vitro model which mimics more closely allergic inflammation. Author.

**Problems in recruiting patients to controlled trials on children with secretory otitis media: a demographic comparison of excluded versus included patients.** Sederberg-Olsen, J., Sederberg-Olsen, N., Thomsen, J., Balle, V. Ear, Nose Throat Clinic, Elsinore, Denmark. *International Journal of Pediatric Otorhinolaryngology* (1998) May 15, Vol. 43 (3), pp. 229–33.

One thousand one hundred and sixty-four patients formed the pool of patients from which we intended to recruit children to a controlled trial evaluating the efficacy of amoxicillin-clavulanate and penicillin-V in the treatment of secretory otitis media (SOM). Only 360 patients ended up to be evaluated, consisting only 30 per cent of primarily involved patients. The spontaneous improvement of the tympanometric condition was the major course of pre-trial dropouts. The demographic composition of included and excluded patients did not differ, as one might have expected. Very little has previously been published about this great number of excluded patients even though other authors must have had the same experience. It is concluded that a three-month duration of SOM, evaluated by tympanometry by the investigators, is required as a minimum to qualify for entering a trial evaluating SOM. Author.

**Prehospital airway management in the actually injured patient: the role of surgical cricothyrotomy revisited.** Gerich, T. G., Schmidt, U., Hubrich, V., Lobenhoffer, H. P., Tscherne, H. Department of Trauma Surgery, Hannover Medical School, Germany. *Journal of Trauma* (1998) August, Vol. 45 (2), pp. 312–4.

**BACKGROUND:** Ensuring an unobstructed airway and adequate oxygenation are first priorities in the resuscitation of the trauma patient. In situations of difficult endotracheal intubation, rapid sequence protocols frequently include the use of paralytic agents and cricothyrotomy for airway management. Recent literature findings suggest that the prehospital use of cricothyrotomy is too frequent. The purpose of this study was (a) to evaluate the efficacy of a rapid sequence intubation protocol without the use of paralytic agents, and (b) to determine the need for cricothyrotomy by using this protocol in the field. **METHODS:** We prospectively analyzed 383 acutely injured patients who were in need of airway control. Success rates, indications, and complications of endotracheal intubation and cricothyrotomy were analyzed. **RESULTS:** Successful orotracheal intubation on the scene with the use of this protocol was performed in 373 of 383 patients (97 per cent). Two patients (0.5 per cent) arrived at the trauma center with unrecognized esophageal intubation. Eight patients underwent cricothyrotomy in the field, six without previous attempts at intubation. **CONCLUSION:** Experienced emergency medical services personnel can effectively perform endotracheal intubation with narcotic analgesics without the use of paralytic agents in the field. With proper training for field airway management, cricothyrotomy in the field can be reduced to a few indications with high success rates. Author.