

Abstract selection

Since January, a selection of abstracts has appeared in each issue as an additional service to subscribers/readers. We are greatly indebted to the following additional Journals, their parent organisations and publishers for allowing us to publish abstracts which are of interest within our field and these are reproduced verbatim.

Acta Neurologica Scandinavica (Munksgaard International Publishers)
American Dental Association Journal (American Dental Association)
American Journal of Diseases of Children (American Medical Association)
American Journal of Human Genetics (University of Chicago Press)
American Journal of Surgery (Cahners Publishing Co. Inc., Medical-Health Care Group)
Archives of Environmental Health (Heldref Publications)
Archives of Internal Medicine (American Medical Association)
British Medical Bulletin (Churchill Livingstone Medical Journals)
Clinical Nephrology (Dustri-Verlag)
Clinical Orthopaedics and Related Research (J. B. Lippincott & Co.)
Clinical Science (The Medical Research Society & The Biochemical Society)
Critical Care Medicine (Society of Critical Care Medicine, Williams and Wilkins)
Cranio—Journal of Craniomandibular Practice (Williams and Wilkins)
Developmental Medicine and Child Neurology (Spastics Society—Mac Keith Press)
Drug Research (Arzneimittel-Forschung)
Infection (MMV Medizin Verlag)
Israel Journal of Medical Sciences
Journal of Bone and Joint Surgery—British Volume (British Editorial Society of Bone and Joint Surgery)
Journal of Clinical Pathology (British Medical Association)
Journal of Indian Council of Medical Research
Journal of Neurological Sciences (Edizioni Minerva Medica)
Journal of Oral and Maxillofacial Surgery (W. B. Saunders & Co.)
Journal of Pediatric Psychology (Plenum Publishing Corporation)
Journal of The Royal Naval Medical Service (Institute of Naval Medicine)
Journal of Tropical Medicine and Hygiene (Blackwell Scientific Publications Ltd.)
Medical Journal of Australia (Journal of the Australian Medical Association)
Pharmatherapeutica (Clayton-Wrey Publications Ltd.)
Thoracic & Cardiovascular Surgery (George Thieme Verlag)

Auditory evoked potentials and magnetic fields in patients with lesions of the auditory cortex. Leinonen, L., Joutsiniemi, S. L. Low Temperature Laboratory, Helsinki University of Technology, Espoo, Finland. *Acta Neurologica Scandinavica* 1989 Apr, Vol. 79 (4), pp. 316-25.

Auditory evoked potentials and magnetic fields of 40-200 ms latencies were measured from four patients with temporal lobe infarcts and compared with results from healthy subjects. Magnetic fields over the diseased hemisphere were abnormal in all four; the responses were missing in two. In one patient the responses were of abnormally high amplitude, and in one part of the response sequence were missing. Evoked potentials were also abnormal in all four patients and the results were in accordance with the findings in the magnetic field measurements. Author.

Effects of topical treatment with H1 and H2 antagonists on clinical symptoms and nasal vascular reactions in patients with allergic rhinitis. Holmberg, K., Pipkorn, U., Bake, B., Blychert, L. O.

Department of Otorhinolaryngology, Lundby Hospital, Gothenburg University, Sweden. *Allergy* 1989 May, Vol. 44 (4), pp. 281-7. Fifteen asymptomatic subjects with allergic rhinitis participated in a double blind, randomized, crossover, placebo-controlled study. The subjects were pretreated intranasally with a single dose of a selective H1 receptor antagonist, levocabastine, and/or selective H2 receptor antagonist, ranitidine, prior to a nasal allergen challenge. The nasal symptoms obtained at the challenge were assessed using a scoring technique 15 min after the allergen exposure. The nasal airway resistance was determined twice prior to and once after the allergen challenge using anterior rhinomanometry. The nasal mucosal blood flow was determined before and 15 min after allergen challenge using the ¹³³Xe wash-out technique. After pretreatment with the H1 antagonist there was a statistically significant reduction in the number of sneezes and rhinorrhea compared to pretreatment with placebo. Pretreatment with the H2 receptor significantly decreased the rhinorrhea but not the sneeze. The nasal blockage was unaffected by both the H1 and the H2 antagonists. Pretreatment with the H1 and/or the H2 antagonists inhibited the reduction in the nasal mucosal blood flow induced by the allergen challenge to a significant degree. The present findings suggest that topical treatment with the highly selective histamine antagonist, levocabastine, inhibits allergen-induced reflex-mediated symptoms. H1 and H2 receptors do not appear to be involved in the regulation of the tone of the capacitance vessels. This indicates that a more complex mechanism participates in the induction of nasal blockage than the direct effect of histamine on H1 and H2 receptors on the capacitance vessels of the nasal mucosa alone. Both H1 and H2 receptors are of importance for the regulation of nasal mucosal blood flow during the allergic reaction. Author.

Clinical and pathologic prognostic variables in oropharyngeal squamous cell carcinoma. Conte, C. C., Ergin, M. T., Ricci, A. Jr., Deckers, P. J. Department of Surgery, Hartford Hospital, Connecticut. *American Journal of Surgery* 1989 Jun, Vol. 157 (6), pp. 582-4.

Eighty-five patients with squamous cell carcinoma of the oropharynx were studied to assess the value of histopathologic parameters related to their survival. The overall survival was 58 per cent at three years and 51 per cent at five years. Stepwise logistic regression analysis was used to determine the prognostic value of each of the histopathologic features. The extent of in situ carcinoma and presence of multifocality were positive predictors of survival, and perineural invasion and nodal involvement on clinical examination were negative predictors. None of the other parameters used in this study attained statistical significance. We conclude that the histologic grade traditionally used to predict clinical behavior may not be useful. Clinical stage, particularly nodal status; perineural invasion; and the multifocal or in situ disease, should be considered in pathologic reports to provide better prognostic profile in oropharyngeal carcinoma. Author.

Use of Vicryl mesh in prevention of postrhinoplasty dorsal irregularities. Gilmore, J. *Annals of Plastic Surgery* 1989 Feb, Vol. 22 (2), pp. 105-7.

Small, palpable, and visible dorsal irregularities may occur in as many as five to 10 per cent of rhinoplasties. They can be unacceptable to both the surgeon and patient and can lead to unwanted secondary surgery. In 88 patients treated over an 18-month period, Vicryl mesh implants consisting of one to three layers of Vicryl were placed under direct vision over the dorsal cartilage; care was taken to avoid disturbing any cartilage implants. Early results were impressive; there was an absence of palpable dorsal irregularities. This report describes the surgical technique and impressions during the 18-month period. Author.

Detailed morphometry of the nose in patients with Treacher Collins

syndrome. Farkas, L. G., Posnick, J. C. Craniofacial Measurement Laboratory, Hospital for Sick Children, Toronto, Ont, Canada. *Annals of Plastic Surgery* 1989 Mar, Vol. 22 (3), pp. 211-9.

Patients with Treacher Collins syndrome were studied regarding 10 nasal, one orbital and four facial measurements as well as 10 facial proportion indexes. Data from 15 to 24 patients were related to normal values. The most normal feature was found to be the nose, whose basic measurements were optimal. Because harmony between the nose and the face is a basic requirement of aesthetic balance in a healthy face, the nose in these patients is the key for calculating changes in the markedly damaged general framework of the face. Abnormal proportion indexes must be corrected by adjusting the abnormal measurement to its optimal level. Thus, the abnormally short bizygomatic width had to be increased by a mean of 13 to 21 mm. Both the nose and the face were usually normal-long, producing acceptable proportions in these patients. Some size disproportionations were found between the root and the soft nose. Their adjustment should be part of the general plan to correct the face of a patient with Treacher Collins syndrome. Author.

Staphylococcus aureus nasal carriage in hemodialysis patients. Its role in infection and approaches to prophylaxis. Chow, J. W., Yu, V. L. Veterans Administration Medical Center, Pittsburgh, PA 15240. *Archives of Internal Medicine* 1989 Jun, Vol. 149 (6), pp. 1258-62.

Staphylococcus aureus infections remain a major cause of morbidity in hemodialysis patients. Chronic dialysis patients are more prone to staphylococcal infections because of their decreased immunity, increased skin colonization by staphylococci, and the multiple needle punctures required for dialysis. The source of the staphylococci is the anterior nares. Elimination of staphylococcal nasal carriage results in a significantly lower infection rate. Selected clinical studies of topical and oral therapy for eradication of staphylococcal nasal carriage are reviewed. Rifampin has been the most consistently efficacious agent, although emergence of resistance is a potential problem. Trials utilizing newer topical and oral agents for prophylactic eradication of S aureus from the nose are indicated. Promising antibiotics include topical mupirocin, the oral quinolones, and clindamycin. Author.

Bilateral vocal cord paralysis with respiratory failure. A presenting manifestation of bronchogenic carcinoma. Baumann, M. H., Heffner, J. E. Division of Pulmonary and Critical Care Medicine, Medical University of South Carolina, Charleston 29425. *Archives of Internal Medicine* 1989 Jun, Vol. 149 (6), p. 1453-4.

A patient with lung cancer presented with upper airway obstruction and hypercapnic respiratory failure resulting from bilateral vocal cord paralysis. Computed tomography demonstrated tumor extension into the superior mediastinum, with probable, disruption of both recurrent laryngeal nerves. Unlike the more common unilateral cord paralysis, bilateral cord dysfunction is often associated with preservation of voice and varying degrees of stridor that may lead to potentially life-threatening delays in diagnosis and treatment. Proper management requires urgent translaryngeal intubation if airway obstruction is high grade, with subsequent consideration of laryngeal surgical procedures for long-term care. Author.

Orbital inflammation and optic neuropathies associated with chronic sinusitis of intranasal cocaine abuse. Possible role of contiguous inflammation. Goldberg, R. A., Weisman, J. S., McFarland, J. E., Krauss, H. R., Hepler, R. S., Shorr, N. Oculoplastics Division, Jules Stein Eye Institute, UCLA School of Medicine 90024-1771. *Archives of Ophthalmology* 1989 Jun, Vol. 107 (6), pp. 831-5.

Three cases of long-standing intranasal cocaine abuse were associated with orbitopathy or optic neuropathy. All three cases were characterized by chronic sinusitis. Histopathologic examination of involved sinus and orbital tissues revealed chronic and acute non-specific inflammation, with no evidence of unusual infections or of idiopathic midline destructive disease. In two of the cases, there was radiographic evidence of contiguous orbital inflammation associated with sinusitis. The inflammatory orbital process in these two cases was steroid responsive, but in one case recurrent inflammation occurred in response to steroid tapering. One patient suffered a complete loss of vision in the involved eye due to fulminant orbital inflammation and optic nerve dysfunction. Author.

Dynamic behavior of the middle ear based on sweep frequency tympanometry. Wada, H., Kobayashi, T., Suetake, M., Tachizaki, H. Department of Mechanical Engineering, Tohoku University, Sendai, Japan. *Audiology* 1989, Vol. 28 (3), pp. 127-34.

A measuring apparatus was developed; its probe tip, which exhibits flat frequency characteristics, enables this apparatus to measure the absolute sound pressure and absolute phase variations versus both sweeping frequency and external auditory canal pressure. Although it is difficult to diagnose ossicular chain separation and fixation from the commonly used tympanograms with a low probe tone frequency (e.g. $f = 220$ Hz), the results obtained with this apparatus enable one to clearly distinguish patients with ossicular chain disorders from normal subjects. Therefore, it seems to be highly useful in the clinical diagnosis of ossicular chain disorders. Author.

Comparative study of middle-latency responses and auditory brainstem responses in elderly subjects. Lenzi, A., Chiarelli, G., Sambataro, G. First Department of Otolaryngology, University of Milan, Italy. *Audiology* 1989, Vol. 28 (3), pp. 144-51.

Auditory senescence is studied through an electrophysiological investigation of the brainstem, midbrain and thalamocortical tracts of auditory pathways. For this purpose, comparative electrophysiological studies were carried out by recording middle-latency responses (MLR) and auditory brainstem responses (ABR) in elderly subjects in the 7th-8th and 9th decades of life and in a control group consisting of young subjects in the 3rd decade of life. All these subjects were free of otological, neurological, vascular and metabolic pathologic states. In elderly subjects, the statistical analysis of the results, especially of MLRs, showed a deterioration in the progression of information from the periphery to the center due to changes in morphology, increased latency, reduced amplitude and poorer reproducibility. Furthermore, a different behavior was noticed in females versus males. Indeed, the shorter latency of evoked potentials in the female control group was remarkably reduced in the elderly subjects. MLRs scan a wide tract of auditory pathways and give evident results even by adopting a juxtaliminal stimulation; therefore, they are a more complete and sensitive test than ABRs for the study of involuntional processes. Author.

Motion sickness and gastric myoelectric activity as a function of speed of rotation of a circularvection drum. Hu, S., Stern, R. M., Vasey, M. W., Koch, K. L. Department of Psychology, Pennsylvania State University, University Park 16802. *Aviation, Space and Environmental Medicine* 1989 May, Vol. 60 (5), pp. 411-4.

Motion sickness symptoms and electrogastragrams (EGGs) were obtained from 60 healthy subjects while they viewed an optokinetic drum rotated at one of four speeds: 15, 30, 60 or 90 degrees.s⁻¹. All subjects experienced vection, illusory self-motion. Motion sickness symptoms increased as drum speed increased up to 60 degrees.s⁻¹; i.e., symptoms decreased at 90 degrees.s⁻¹. Power, spectral intensity, of the EGG at the tachygastria frequencies (4-9 cpm) was calculated at each drum rotation speed since previous studies have shown a close correspondence between development of tachygastrias and motion sickness symptoms. Power at 4-9 cpm increased as a function of drum speed up to 60 degrees.s⁻¹ and then decreased at 90 degrees.s⁻¹. Power at 4-9 cpm and 60 degrees.s⁻¹ was significantly greater than at 15 degrees.s⁻¹. The correlation between the motion sickness symptoms and the power at 4-9 cpm was significant. Thus, drum rotation speed influenced the spectral power of the EGG at 4-9 cpm, tachygastria, and the intensity of motion sickness symptoms. Author.

Basaloid-squamous carcinoma of the hypopharynx. McKay, M. J., Bilous, A. M. Department of Radiation Oncology, Westmead Hospital, Sydney, Australia. *Cancer* 1989 Jun 15, Vol. 63 (12), pp. 2528-31.

Basaloid-squamous carcinoma, a variant of squamous cell carcinoma, has only recently been described as arising in the pharynx. The cardinal histopathologic feature, as its name suggests, is a biphasic cellular pattern of basaloid and squamous components in an intimate relationship. Major differential diagnoses include adenoid cystic, squamous, adenosquamous, and sarcomatoid carcinomas. Although the number of reported cases is small, basaloid-squamous carcinoma appears biologically virulent, with a propensity to aggressive local behavior and early regional and distant metastasis, and subsequent poor survival. The authors add a

further case of basaloid-squamous carcinoma to the world literature. Author.

Olfactory neuroblastoma. O'Conner, T. A., McLean, P., Juillard, G. J., Parker, R. G. Department of Radiation Oncology, University of California Los Angeles, School of Medicine. *Cancer* 1989 Jun 15, Vol. 63 (12), pp. 2426-8.

Fifteen patients with olfactory neuroblastoma were treated during the 17-year period of 1969 to 1986. Data was analyzed with respect to age at presentation, sex, presenting signs and symptoms, stage, and results of treatment. Age ranged from four to 67 years with the median age being 27 years. Median follow-up was eight years. Local control was achieved in nine of nine patients or 100 per cent with successful surgical resection, i.e., minimal residual disease, followed by postoperative radiation therapy (45 to 65 Gy) was employed. There were no distant failures when the primary site was controlled. Regional lymph node metastases were infrequent: only 13 per cent (two of 15 patients) presented with positive nodes. Three of four patients treated initially with surgery alone had a local recurrence, two of which were successfully salvaged by combined therapy. There were four patients treated with radiation therapy alone: three had persistent disease after radiation therapy, and one patient was controlled with 65 Gy. Olfactory neuroblastoma has a propensity to recur locally when treated with surgery alone. The author's experience suggests excellent local control can be achieved with surgery immediately followed by radiation therapy. Thus the authors recommend planned combined treatment for all resectable lesions. Author.

Accelerated hyperfractionation radiation therapy for carcinoma of the nasopharynx. Techniques and results. Wang, C. C. Department of Radiation Medicine, Massachusetts General Hospital, Boston 02114. *Cancer* 1989 Jun 15, Vol. 63 (12), pp. 2461-7.

Experience using accelerated hyperfractionation radiation therapy (twice-a-day) in the treatment of 60 patients with squamous cell carcinoma of the nasopharynx is presented. The local control rate at the primary sites was significantly improved statistically as compared with 58 patients with the same disease and stages treated by once daily (once-a-day) radiation therapy at the Massachusetts General Hospital (MGH) five years before twice-a-day radiation therapy. For the T1-2 lesions, the five year actuarial local control rates were 89 per cent after twice-a-day and 55 per cent after once-a-day radiation therapy, with a P value of 0.0021. For the T3-4 lesions, the corresponding rates were 77 per cent and 45 per cent, with a P value of 0.026. The improved local control rates occurred in patients with N2-3 disease and among male and female patients, and were reflected in patient survival. Although our study is not randomized, the improved local control and survival rates after twice-a-day radiation therapy are encouraging. However, the final answer will require a clinical randomized trial in the management of carcinoma of the nasopharynx. Author.

Patterns of failure after total laryngectomy for glottic carcinoma. Foote, R. L., Buskirk, S. J., Stanley, R. J., Grambsch, P. M., Olsen, K. D., De Santo, L. W., Earle, J. D., Weiland, L. H. Division of Radiation Oncology, Mayo Clinic, Rochester, Minnesota 55905. *Cancer* 1989 Jul 1, Vol. 64 (1), pp. 143-9.

The 136 patients who underwent total laryngectomy as the primary treatment for squamous cell carcinoma of the glottis at the Mayo Clinic in 1970 through 1981 were followed by retrospective record review for at least four years or until death, local recurrence, neck recurrence, or delayed neck metastasis. Cancer recurred or progressed in a previously untreated area in 35 patients; for the 29 affected above the clavicles, the median time to manifestation was 9.9 months. A Cox model with four risk factors (P less than 0.05) was found to predict failure above the clavicles: lymph nodes metastasis in the laryngectomy specimen (Delphian, pretracheal, tracheoesophageal, parathyroid), primary tumor more than 1.5 cm in greatest diameter, subglottic extension, and lymph node metastasis in the neck dissection specimen. A simple risk score computed from the Cox model shows that the more factors present, the higher the risk of disease progression or recurrence. Author.

Auditory brain stem responses in preterm infants: evidence of peripheral maturity. Schwartz, D. M., Pratt, R. E. Jr., Schwartz, J. A. Department of Otorhinolaryngology, University of Pennsylvania Medical Center, Philadelphia. *Ear and Hearing* 1989 Feb, Vol. 10 (1), pp. 14-22.

This study explored further the relationship between peripheral and central auditory maturation on the basis of the auditory brain stem response. Auditory brain stem responses were recorded in preterm infants and adults to rarefaction and condensation click stimuli transduced through insert Tubephones. Infant recordings presented a triphasic waveform preceding wave I similar to that of the cochlear receptor potentials seen with adults during electrocochleography. Wave I latency and amplitude were found to be equivalent to those of adult subjects. Moreover, neither latency nor amplitude variability among infant wave I responses was found to be any greater than adults. Latencies of waves III and V, however, exhibited the expected differences relative to the adult comparison group. When the indirect evidence of cochlear receptor potentials in the infant are viewed adjacent to the observations that their ABR wave I latency, amplitude, and variability were entirely consistent with those of young adults, the data lend strong support for peripheral auditory electromaturity. These data are discussed relative to previously published reports of prolonged wave I latency in the infant which was attributed either to middle ear effects or immaturity of the cochlea and first order VIIIth nerve neurons. Author.

Analysis of auditory evoked potentials by magnitude-squared coherence. Dobic, R. A., Wilson, M. J. Department of Otolaryngology Head and Neck Surgery, University of Washington, Seattle. *Ear and Hearing* 1989 Feb, Vol. 10 (1), pp. 2-13. Evoked potentials are usually analyzed in the time domain (voltage versus time). The most familiar frequency-domain measure, the power spectral density function, displays power as a function of frequency but doesn't distinguish signal power from noise power. The coherence function estimates, for each frequency, the ratio of signal power to total (signal plus noise) power and, thus, indicates the degree to which system output (scalp potential) is determined by input (acoustic stimulus). Coherence ranges from 0 to 1; values above specified critical values can be accepted as demonstrating statistically significant system response. In this paper, we present coherence analysis of human scalp responses to clicks and amplitude-modulated tones. In both cases, this analytic method provides insight into the spectral character of the response (for example, assisting in specifying desirable filter characteristics). Threshold sensitivity is also improved: statistically significant responses can be detected at lower intensity by coherence analysis than by inspection of time-domain waveforms. Author.

Cochlear nerve action potentials during cerebellopontine angle surgery: relationship of latency, amplitude, and threshold measurements to hearing. Stanton, S. G., Cashman, M. Z., Harrison, R. V., Nedzelski, J. M., Rowed, D. W. Department of Otolaryngology, Sunnybrook Medical Centre, University of Toronto, Ontario, Canada. *Ear and Hearing* 1989 Feb, Vol. 10 (1), pp. 23-8.

The cochlear nerve action potential (AP) was monitored during two types of hearing preservation surgery: (1) removal of small cerebellopontine angle tumors and (2) retrolabyrinthine vestibular nerve section. The purpose of this investigation was to study the relationship between changes in intraoperative AP latency, amplitude, and threshold, and changes in audiometric hearing subsequent to surgery. The presence or absence of a cochlear nerve AP toward the end of surgery accurately predicted the presence or absence of postoperative hearing (93 per cent). Regression analyses were performed to explore the relationship between audiometric pre- and postoperative thresholds and intraoperative AP threshold changes. Statistically significant relationships were found for (1) pre-operative audiometric thresholds and initial AP click thresholds ($p = 0.0068$); (2) final AP click thresholds and postoperative audiometric thresholds ($p = 0.0003$); (3) AP click ($p = 0.0001$) and 1 kHz ($p = 0.0006$) threshold shifts and pre- to postoperative audiometric threshold shifts. No relationship was found between either AP latency or amplitude values and postoperative hearing. Intraoperative threshold measurements can be used as an indicator of hearing change. If amplitude or latency indices are also monitored it may be better to use stimulus levels close to the evoked potential threshold. Author.

Neurologic findings of a patient with acquired immune deficiency syndrome. Hart, C. W., Cokely, C. G., Schupbach, J., Dal-Canto, M. C., Coppleson, L. W. Head and Neck Surgery, Northwestern University Medical School, Chicago, Illinois. *Ear and Hearing* 1989 Feb, Vol. 10 (1), pp. 68-76.

A Caucasian male contracted acquired immune deficiency syndrome (AIDS) following a blood transfusion during heart surgery. Four years later he developed dizziness, dysequilibrium and emotional disturbances. Neurotologic evaluation implicated central vestibular and auditory dysfunction. Electronystagmographic findings showed ataxic pursuit and optokinetic nystagmus, with a total loss of caloric excitability. The auditory brain stem response indicated delayed absolute and interpeak latencies, and the synthetic sentence identification test yielded abnormally reduced scores bilaterally. Psychological tests suggested organic brain disease with severe anxiety and depression. At autopsy the AIDS retrovirus was found in mononuclear and multinucleated giant cells in the cortical and subcortical gray matter, cerebral and cerebellar white matter, and throughout the brain stem. Pathologic changes were consistent with the patient's neurotologic profile. Author.

Management of local residual primary lesion of nasopharyngeal carcinoma (NPC): are higher doses beneficial? Yan, J. H., Qin, D. X., Hu, Y. H., Cai, W. M., Xu, G. Z., Wu, X. L., Li, S. Y., Gu, X. Z. Dept. Radiation Oncology, Cancer Hospital, Chinese Academy of Medical Sciences, Beijing. *International Journal of Radiation Oncology, Biology and Physics* 1989 Jun, Vol. 16 (6), pp. 1465–9. One hundred and eighty-two nasopharyngeal carcinoma (NPC) patients, treated from March 1958 through 1978, received 70 Gy or more and were left with gross residual lesion in the nasopharynx, were retrospectively analyzed. Ninety-two patients were given a boost by reduced portals to a total of 90–120 Gy (boost group) whereas for the other non-randomized 90 patients, the treatment was stopped at 70 Gy (observation group). The local recurrence, distant metastasis and 5-year survival rates of the two groups are: 35 per cent (32/92) vs. 58 per cent (52/90), 20 per cent (18/92) vs. 43 per cent (39/90) and 54 per cent (50/92) vs. 21 per cent (19/90), respectively. The benefit of boost is more apparent in patients with T1–2 than T3–4 lesions (p less than 0.001), at increased risk of radiation encephalo-myelitis from 5.5 per cent to 17 per cent. The authors believe that boost be given to patients with early Stage T or small residual lesion at the primary site of NPC. Author.

Proton therapy for carcinoma of the nasopharynx: a study in comparative treatment planning. Brown, A. P., Urie, M. M., Chisin, R., Suit, H. D. Department of Radiation Medicine and Diagnostic Radiology, Massachusetts General Hospital, Boston 02114. *International Journal of Radiation Oncology, Biology and Physics* 1989 Jun, Vol. 16 (6), pp. 1607–14.

Radiation therapy for nasopharyngeal carcinoma is technically difficult because of the complexity of the regional anatomy and the natural history of the disease. The results of a study are presented showing how detailed diagnostic information available from MRI is helpful in defining the target volume to be irradiated and the critical normal structures. By using 3-dimensional planning techniques, an assessment was made of the relative merits of proton beam therapy and of X ray treatment for patients with early stage and locally advanced carcinoma of the nasopharynx. For both types of patient, the study suggests that the use of protons for the major part of treatment results in a more even distribution of dose to the tumor and an increase of approximately 5 Gy in median tumor dose with substantial reductions in doses to adjacent normal tissues. The superior dose distributions possible with protons should translate into improved local control and reduced morbidity. The difficulties of proton treatment planning for this site are addressed. Author.

Clinical and pathological features of non-Hodgkin's lymphoma of the tonsil. Review of the literature and report of 10 cases. Lugassy, G., Hurwitz, N., Shtalrid, M., Varon, D., Marshak, G., Berrebi, A. Department of Hematology, Kaplan Hospital, Rehovot, Israel. *Israel Journal of Medical Science* 1989 May, Vol. 25 (5), pp. 251–5. Ten patients with tonsillar lymphomas diagnosed and treated in our hematology unit from 1979 to 1986 are reported. The heterogeneous histology at presentation, the aggressiveness of the histologic types during relapse, and the relatively low incidence of gastrointestinal tract involvement are discussed. A review of the literature is presented. In view of the better survival rate obtained with chemotherapy or combined chemo- and radiotherapy, we confirm that lymphomas of the tonsil should be aggressively treated, regardless of the staging. Among our 10 cases, two are of special interest since they progressed into highly malignant dis-

orders: B-acute lymphoblastic leukemia and Burkitt's lymphoma. Author.

SCH 434: a new antihistamine/decongestant for seasonal allergic rhinitis. Storms, W. W., Bodman, S. F., Nathan, R. A., Chervinsky, P., Banov, C. H., Dockhorn, R. J., Jarmoszuk, I., Zeitz, H. J., McGeady, S. J., Pinna, J. L., et al. W. C. Service Allergy and Asthma Research Foundation, Colorado Springs, Colo. *Journal of Allergy and Clinical Immunology* 1989 Jun, Vol. 83 (6), pp. 1083–90.

In a double-blind, multicenter study, we compared the effects of SCH 434 (Claritin-D; Schering Corp., Kenilworth, N.J.), a new sustained-release, combination antihistamine/decongestant medication, with the effects of its individual components and placebo in 435 patients with seasonal allergic rhinitis. SCH 434 contains 5 mg of loratadine, a nonsedating antihistamine, and 120 mg of pseudoephedrine as the decongestant component. Administered twice daily in this study, SCH 434 effected a 50 per cent decrease in total symptom scores at day four and was significantly (p less than or equal to 0.03) more effective than the components alone or the placebo. Loratadine or pseudoephedrine alone, with 43 per cent and 33 per cent decline in symptom scores, respectively, also was more effective than placebo (p less than 0.05). As expected, pseudoephedrine alone was more effective than loratadine (p less than 0.01) in relieving nasal stuffiness; SCH 434 was more effective (p less than or equal to 0.01) than placebo and loratadine in relieving nasal stuffiness. All treatments were safe and well tolerated, although insomnia and dry mouth were noted in a significant number of patients who received either SCH 434 or pseudoephedrine. No serious side effects were noted. The incidence of sedation did not differ significantly among the four treatment groups. We conclude that SCH 434 is a safe and effective treatment for symptoms of seasonal allergic rhinitis. The combination drug (SCH 434) was better than its components for some, but not all, symptoms. Author.

Aural polyps as predictors of underlying cholesteatoma. Milroy, C. M., Slack, R. W., Maw, A. R., Bradfield, J. W. University Department of Pathology, Bristol Royal Infirmary. *Journal of Clinical Pathology* 1989 May, Vol. 42 (5), pp. 460–5.

In a retrospective study of 96 patients 16 different histological features were examined in 100 aural polyps to see whether some or any could be used to predict the presence or absence of a cholesteatoma underlying the polyp. The patients were divided into those who had cholesteatoma and those who did not, so that discriminatory features were identified. These were combined to make an overall prediction of the probability of a cholesteatoma in the middle ear. The results showed that any polyp that (i) was composed of raw granulation tissue and (ii) contained keratin as flakes or masses had a 70–80 per cent probability of being associated with an underlying cholesteatoma. In contrast, when a polyp (i) was composed of a fibrous core, (ii) had a covering epithelium, and (iii) contained glands and lymphoid aggregates, there was a 70–80 per cent probability of cholesteatoma being absent. This scoring system can be used to help surgeons decide whether surgical exploration of the mastoid should be undertaken. Author.

Histamine synthesis by respiratory tract micro-organisms: possible role in pathogenicity. Devalia, J. L., Grady, D., Harmaneri, Y., Tabaqchali, S., Davies, R. J. Department of Respiratory Medicine, St. Bartholomew's Hospital, London. *Journal of Clinical Oncology* 1989 May, Vol. 42 (5), pp. 516–22.

Five bacterial species considered to be potential pathogens in acute exacerbations of chronic bronchitis, cystic fibrosis, and pneumonia—*Branhamella catarrhalis*, *Haemophilus parainfluenzae*, *Pseudomonas aeruginosa*, *Staphylococcus aureus* and *Streptococcus pneumoniae*—were evaluated for their potential to synthesise histamine in vitro. Bacterial species commonly isolated from infected sputum but generally not considered to be pathogenic—*Enterobacteriaceae*, *Neisseria pharyngis*, coagulase negative staphylococci, alpha-haemolytic streptococci, and *Candida albicans*—were similarly studied. Of the 'pathogens', the Gram negative species *B catarrhalis*, *H parainfluenzae* and *Ps aeruginosa* synthesised clinically important amounts of histamine; this was not the case for the Gram positive species *S aureus* and *S pneumoniae*. Of the 'non-pathogenic' species, only the *Enterobacteriaceae*, as a group, were found to synthesise clinically important amounts of histamine. These results show that some Gram negative bacteria,

associated with acute exacerbations in respiratory infections, produce histamine and possibly other inflammatory mediators, which may contribute to their pathogenicity in the lower respiratory tract in vivo. Author.

Epidemiology of otitis media during the first seven years of life in children in greater Boston: a prospective, cohort study. Teele, D. W., Klein, J. O., Rosner, B. Department of Pediatrics, Boston City Hospital, MA 02118. *Journal of Infectious Diseases* 1989 Jul, Vol. 160 (1), pp. 83-94.

To determine the epidemiology of acute otitis media (AOM) and duration of middle ear effusion (MEE), we followed consecutively enrolled children from shortly after birth until seven years of age. Because some children dropped out of the study, data were analyzed for 877 children observed for at least one year; 698 were observed for at least three years, and 498 were observed until seven years of age. By one year of age, 62 per cent of the children had greater than or equal to one episode of AOM and 17 per cent had greater than or equal to three episodes; by three years of age, 83 per cent had greater than or equal to one episode of AOM and 46 per cent had greater than or equal to three episodes. The peak incidence occurred during the second six month period of life. Significantly increased risk (by multivariate analysis) for AOM was associated with male gender, sibling history of recurrent AOM, early occurrence of AOM, and not being breast fed. MEE persisted after onset of AOM for weeks to months; prolonged duration of MEE was associated with male gender, sibling history of ear infection, and not being breast fed. Author.

Patient response to temporomandibular joint arthroscopy: preliminary findings in 24 patients. Israel, H. A., Roser, S. M. Department of Oral and Maxillofacial Surgery, Columbia University, School of Dentistry and Oral Surgery, New York, NY 10032. *Journal of Oral and Maxillofacial Surgery* 1989 Jun, Vol. 47 (6), pp. 570-3.

A group of 24 patients who underwent TMJ arthroscopy with lysis of adhesions and lavage of 28 joints were evaluated for changes in symptoms and mandibular opening. The mean follow-up period was 7.5 months. The results revealed a general improvement in pain, joint noise, and hypomobility following TMJ arthroscopy.

Measurement of mandibular opening revealed a mean increase of 5.9 mm. These results suggest that TMJ arthroscopy appears to be an excellent modality for the palliation of symptoms of TMJ pain, joint noise, and hypomobility. Author.

Non-Hodgkin's lymphoma of the oral cavity associated with AIDS. Kaugars, G. E., Burns, J. C. Department of Oral Pathology, School of Dentistry, Medical College of Virginia Commonwealth University, Richmond, Va. *Oral Surgery, Oral Medicine, Oral Pathology* 1989 Apr, Vol. 67 (4), pp. 433-6.

A 34-year-old homosexual man had a large mass of the left side of the hard palate, alveolar bone resorption was observed in the area of the tumor. Microscopically, the lesion was interpreted as non-Hodgkin's lymphoma, and immunocytochemical marker studies were consistent with a B-lymphocyte lineage. Author.

Systemic antibiotics for treatment of the conjunctivitis-otitis media syndrome. Bodor, F. F. Fairview Hospital Physicians Center, Cleveland, OH 44111. *Pediatric Infectious Diseases* 1989 May, Vol. 8 (5), pp. 287-90.

In a private pediatric practice setting 114 episodes of conjunctivitis-otitis syndrome were treated with orally administered antibiotics. In 108 (95 per cent) of these infections *Haemophilus influenzae* was isolated from the pretreatment cultures of the conjunctivae; 61 were susceptible and 47 (44 per cent) were resistant to ampicillin by a disc diffusion technique. Six cultures grew *Streptococcus pneumoniae*, all ampicillin-susceptible. Symptoms of conjunctivitis disappeared in two to three days in all but one patient. Of the 48 follow-up conjunctival cultures three to five days after start of therapy, 46 grew no pathogens. Author.

Subjective pulsatile tinnitus cured by carotid endarterectomy. A case report. Louwrens, H. D., Botha, J. van der Merwe, D. M. Department of Surgery, University of Stellenbosch. *South African Medical Journal* 1989 May 20, Vol. 75 (10), pp. 496-7.

A 70-year-old woman with unilateral pulsatile tinnitus was relieved of the complaint after carotid endarterectomy. Internal carotid artery stenosis presenting with pulsatile tinnitus is rare. Endarterectomy can relieve symptoms if the correct diagnosis is made. Author.