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 Journals, their parent organisations and publisher for allowing us to publish abstracts which are of interest within our field and these are reproduced verbatim.

Alabama Medicine (Medical Association of the State of Alabama USA)

American Journal of Neuro-Radiology (Williams and Wilkins)

American Journal of Orthodontics and Dento-Facial Orthopaedics (C.B. Mosby Co.)

Annals of Emergency Medicine (American College of Emergency physicians)

Archives of Pathology and Laboratory Medicine (American Medical Association)

Archives of Surgery (American Medical Association)

Development Medicine and Child Neurology (Spastics Society-MacKeith Press)

Infection (M.M.V. Medizine Verlag)

Journal of the American Geriatric Society (Elsevier)

Journal of Burn Care and Rehabilitation (J.B.C. Publishing Inc.) Journal of Dermatologic Surgery and Oncology

Journal of Neurology, Neurosurgery and Psychiatry (British Medical Association)

Pediatric Emergency Care (Williams and Wilkins)

Toxicology (Elsevier)

Hypersensitivity to larvae of chironomids (non-biting midges). Cross-sensitization with crustaceans. Eriksson, N. E., Ryden, B., Jonsson, P. Department of Medicine, Lanssjukhuset, Halmstad, Sweden. *Allergy* 1989 Jul, Vol. 44 (5), pp. 305–13.

In 2,368 consecutive adult patients with asthma and/or rhinitis the incidence of positive skin prick test (SPT) with a chironomid extract (CHIR) (produced from 'red feather mosquito larvae' used as fish food) was 14 per cent (26 per cent in atopics and 4 per cent in non-atopics). RAST with chironomid was positive in 4 per cent of 110 consecutive sera (8 per cent in atopic sera). Significant correlations were found between RAST and SPT results with chironomid and between SPT results with CHIR and with various crustaceans. Correlations were also found reciprocally among SPT results with different crustaceans and between some crustaceans and molluscs (clam and oyster) as well as among RAST results with chironomid, shrimp and crab. Inhibition experiments showed that chironomid extracts inhibited RAST with shrimp and vice versa. It is concluded that Chironomidae might be allergens of clinical importance in asthma and rhinitis in Sweden, that cross-allergy exists between chironomids and shrimp and that cross-allergy also might occur among chironomids, crustaceans and molluscs. Author,

Occupationally related respiratory symptoms in trout-processing workers. Sherson, D., Hansen, I., Sigsgaard, T. Department of Occupational Medicine, Vejle County Hospital, Denmark. *Allergy* 1989 Jul, Vol. 44 (5), pp. 336–41.

All eight production workers from a small trout-processing factory were studied because of respiratory or rhinitis symptoms when working next to the automatic gutting machine. Seven of the eight had positive histamine provocation tests. Four patients had elevated total IgE levels while one had a slightly elevated eosinophil count. All workers had either weakly or moderately positive RAST against contaminated water from the outlet drain of the gutting machine. This water contained 1 microgram endotoxin/ml. We concluded that five of the workers had probably developed occupationally related asthma from inhalation of contaminated aerosol from the gutting machine. Inhalation of endotoxin from gramnegative bacteria may be the cause of this disorder. An alternative explanation is a Type I allergy caused by fish or bacterial protein with or without a simultaneous effect of endotoxin. Author.

Clinical and bacteriologic features of chronic sinusitis in children.

Tinkelman, D. G., Silk, H. J. Department of Pediatrics, Medical College of Georgia, Augusta. *American Journal of Diseases Children* 1989 Aug, Vol. 143 (8), pp. 938–41.

The clinical and bacteriologic aspects of chronic sinusitis in childhood were studied. Of 35 children who underwent surgical procedures for chronic sinusitis, 22 had positive bacteriologic cultures of aspirates from the sinus. The most common organisms isolated were Haemophilus influenzae, Streptococcus pneumoniae, and Branhamella catarrhalis. Five of eight S pneumoniae strains were relatively resistant to penicillin and resistant to sulfamethoxazoletrimethoprim. All of the B catarrhalis and 20% of the H influenzae organisms were beta-lactamase positive. Overall, 14 of 28 of the bacteria were penicillin resistant. In addition, all 12 children two years of age or younger had a positive bacterial culture as compared with much lower rates in older children. Although the incidence of S pneumoniae strains that are relatively resistant seems to be rising, to our knowledge we report the first description of these organisms as significant pathogens in chronic childhood sinusitis. These results indicate that chronic, difficult to manage sinusitis in very young children is frequently bacterial in origin, especially if the patient is two years old or younger. In light of the frequent failure of antibiotic therapy and considering the incidence of relatively resistant S pneumoniae strains, puncture of the sinus should be considered early in the course of chronic sinusitis to isolate pathogenic organisms and determine appropriate antimicrobial therapy. Author.

Stereophotogrammetric study of growth and development of the nose. Burke, P. H., Hughes Lawson, C. A. Department of Child Dental Health, School of Clinical Dentistry, Sheffield, England. *American Journal Orthodontics Dentofacial Orthopedics* 1989 Aug, Vol. 96 (2), pp. 144–51.

A total of 269 contour maps of the face were measured in three dimensions to study growth and development of the nose. The maps were derived from a mixed longitudinal study of 26 boys and 26 girls between the ages of 9 and 16 years, and were recorded annually. Various nasal parameters were measured to study growth of linear parameters and external nasal volume. Apart from dorsum of the nose between 9 and 11 years of age, all linear parameters were larger for boys by an amount increasing with age. The early growth in girls and late growth in boys suggested the presence of an adolescent growth spurt in the nose, which was confirmed by volumetric measurements. Developmentally the greatest change occurred in anteroposterior prominence of nasal tip in both sexes and the least change occurred in intercanthal width. Author.

Unrecognized endobronchial intubation of emergency patients. Bissinger, U., Lenz, G., Kuhn, W. Department of Anesthesiology, University of Tuebingen, Federal Republic of Germany. *Annals of Emergency Medicine* 1989 Aug, Vol. 18 (8), pp. 853–5.

Although intubation of emergency patients in the field is a routine measure, endotracheal tube misplacement remains a serious problem. Using radiologic criteria, the frequency of undetected endobronchial intubation by physicians was determined restrospectively in 100 (78 traumatized) field-intubated adult patients (72 men and 28 women; age, 18 to 90 years; mean age, 39.1 years) consecutively admitted to the University Hospital of Tuebingen, Tuebingen, Federal Republic of Germany, between January 1987 and February 1988. Position of tube tip relative to carina was evaluated on anteroposterior chest radiographs made on admission. Inadvertent endobronchial intubation was not recognized by the physician and the admitting anesthesiologist in 7 per cent of the reviewed cases, and endotracheal positioning of the tube tip near the carina (two or less cm) occurred in another 13 per cent. While unilateral intubation is not immediately catastrophic, the resulting systemic hypoxemia and hypercapnia are aggravated by potential accompanying injury (eg, lung contusion, hematothorax, pneumothorax, shock, or cerebrocranial trauma), which can lead to secondary damage (eg, acute respiratory insufficiency,

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ischemic brain damage). Evaluation of the depth of tube insertion with the aid of common clinical techniques is particularly unreliable in the case of thoracic trauma, aspiration, or previously existing pulmonary disease. Suggested measures for prevention of endobronchial intubation are improved and intensified training of emergency staff to increase awareness of and prevent the catastrophic effects of endobronchial malposition of the tube tip, tube shortening before intubation, assessment of insertion depth by checking length scale on the tube, and avoidance of patient head and neck movement. Author.

Unsuspected foreign body in the frontal sinus and anterior cranial fossa. Kaplan, A. S., Green, J. D. Jr., McCaffrey, T. Department of Otorhinolaryngology, Mayo Clinic, Rochester, Minnesota 55905. *Annals of Emergency Medicine* 1989 Sep, Vol. 18 (9), pp. 988–90.

We present the case of a 46-year-old man who was involved in a motor vehicle accident in which his forehead struck the dashboard of his semi-tractor trailer. A toggle switch penetrated the anterior and posterior tables of his frontal sinus and lodged in the frontal lobe. The foreign body was not found on physical examination at an emergency care facility. The wound was closed, and the patient was sent home. Severe headaches prompted his return the next day. Skull roentgenograms showed the toggle switch, and the patient was referred to our institution for definitive care. This unusual case serves to emphasize the potential for a foreign body to penetrate the frontal sinus with few physical findings. Author.

Clinical application of the free flap based on the cutaneous branch of the acromiothoracic artery. Zhou, L. Y., Cao, Y. L. Department of Plastic Surgery, Shanghai Ninth People's Hospital, Shanghai Second Medical University, China. *Annals of Plastic Surgery* 1989 Jul, Vol. 23 (1), pp. 11–16.

The nasal reconstruction in eight patients and cheek reconstruction in one using a free flap from the deltoid region has been successfully undertaken in our department since August 1987. The flap has a direct cutaneous artery—the acromial artery—as its vascular axis. The experiences and a brief anatomical review of the donor site are reported. Author.

Nasal astrocytoma or nasal glial heterotopia? Chan, J. K., Lau, W. H. Department of Pathology, Queen Elizabeth Hospital, Hong Kong. *Archives of Pathology and Laboratory Medicine* 1989 Aug, Vol. 113 (8), pp. 943–5.

This report describes a unique astrocytic lesion of the nasal cavity that was connected to a frontal lobe astrocytoma via the eroded cribriform plate. The nasal lesion probably resulted from downward extension of the cerebral astrocytoma. Other possibilities included coexistence of nasal glial heterotopia and intracerebral astrocytoma, and nasal glial heterotopia complicated by neoplastic transformation and intraceranial extension. Author.

Thalamocortical synapses with identified neurons in monkey primary auditory cortex: a combined Golgi/EM and GABA/peptide immunocytochemistry study. Cipolloni, P. B., Keller, A. Edith Nourse Rogers Memorial Veterans Hospital, Bedord, MA 01730. *Brain Research* 1989 Jul 17, Vol. 492 (1-2), pp. 347–55.

The objective of this study was to identify neurons in layer IV of the monkey primary auditory cortex (area KA) that are postsynaptic to thalamocortical axon terminals. Thalamocortical axon terminals were labelled by lesion-induced degeneration; neurons postsynaptic to these afferents were labelled by the Golgi/EM method followed by postembedding immunocytochemistry. Five of the six non-pyramidal neurons examined received synapses from thalamocortical axon terminals. All of these cells were immunoreactive for gamma-aminobutyric acid (GABA). One of the cells stained also with an antiserum to somatostatin, and another for cholecystokinin. None of the cells examined were immunoreactive to substance P, and in no instance were two different peptides colocalized within the same GABA-positive neuron. Author.

Reconstruction of the alar groove. Chait, L. A., Fayman, M. S. Department of Surgery, University of the Witwatersrand, Johannesburg, South Africa. *British Journal of Plastic Surgery* 1989 May, Vol. 42 (3), pp. 281–4.

The obliteration of a well-defined alar groove is common after nasal alar reconstruction. A method is described that can be used at the time of reconstruction to ensure the continued definition of the groove or to restore it in cases where it has been obliterated. The technique is based on the natural tendency of the skin to tube itself. Cheek skin is advanced beneath the posterior free edge of the reconstructed ala so that this edge now comes into contact with an epidermal surface. As this edge now tends to tube itself, a natural alar groove is produced. This method has been used successfully in six cases. Author.

Non-Hodgkin's lymphoma of the larynx (stage IE). Morgan, K., MacLennan, K. A., Narula, A., Bradley, P. J., Morgan, D. A. Department of Histopathology, University Hospital Nottingham, England. *Cancer* 1989 Sep 1, Vol. 64 (5), pp. 1123–7.

Four cases of non-Hodgkin's lymphoma (NHL) limited to the larynx are described. All were diffuse, high-grade, B-cell lymphomas of large lymphoid cell type (three centroblastic and one immunoblastic). Immunocytochemistry was performed on three cases; two showed monoclonal cytoplasmic immunoglobulin and one showed monoclonal surface immunoglobulin. In three cases, complete remission was obtained with radical radiotherapy; the fourth patient died suddenly of acute laryngeal obstruction. The cases are compared with other reports of laryngeal non-Hodgkin's lymphoma (NHL) in the literature. The biologic behavior of these tumors has many features in common with other extranodal lymphomas arising from mucosa-associated lymphoid tissue (eg, a tendency to remain localized for long periods of time and to disseminate to other extranodal and unusual sites, with good response to radiotherapy for both the primary tumor and extranodal recurrences). Author.

Retinitis pigmentosa, hearing loss and vitiligo: report of two patients. Dereymacker, A. M., Fryns, J. P., Ars, J., Andresescu, J., van den Berghe, H. Centre of Human Genetics, University of Leuven, Brussels, Belgium. *Clinical Genetics* 1989 May, Vol. 35 (5), pp. 387–9.

In this report we describe the association of retinitis pigmentosa, hearing loss and vitiligo in two non-related patients. The second patient developed, in addition, an axonal polyneuritis after the age of 30. Previous reports dealing with this unusual combination of symptoms are discussed. Author.

Primary radiotherapy with surgery in reserve for advanced laryngeal carcinoma. Results and complications. Croll, G. A., Gerritsen, G. J., Tiwari, R. M., Snow, G. B. Department of Otolaryngology/Head and Neck Surgery, Free University Hospital, Amsterdam, The Netherlands. *European Journal of Surgical Oncology* 1989 Aug, Vol. 15 (4), pp. 350–6.

A retrospective study of a selected group of 58 patients with T3 and T4 squamous cell carcinomas of the larynx presenting between 1974 and 1984 was undertaken. These patients were treated primarily with radical radiotherapy and salvage surgery in reserve. The aim of this study was to examine survival, recurrence rate and the complications after salvage surgery. In 30 patients the tumor was classified as a T3 and in 28 as a T4. In 14 patients (24 per cent) nodal disease in the neck was present prior to the radiotherapy. Follow-up in all patients continued for at least three years or until death. Nineteen patients (33 per cent) developed locally recurrent tumor and five (9 per cent) developed nodal metastases to the neck. The recurrence in almost every patient was detected within two years after completion of the irradiation. Thirty patients (52 per cent) are alive of whom 29 have no evidence of disease. Of these 30 patients 22 (73 per cent) have their larynx intact and functioning. The five-year adjusted actuarial survival for the whole group of patients is 73 per cent, for the T3NO group 87 per cent and for the T4NO group 75 per cent. Patients with nodal disease responded poorly. After salvage surgery severe postoperative complications developed in 37 per cent of the patients. There were no deaths following salvage surgery. Author.

Serological markers in the diagnosis of histopathological types of nasopharyngeal carcinoma. Sam, C. K., Prasad, U., Pathmanathan, R. Institute for Advanced Studies, University of Malaya, Kuala Lumpur. *European Journal of Surgical Oncology* 1989 Aug. Vol. 15 (4), pp. 357–60.

The titres of IgA against Epstein-Barr virus, viral capsid antigens and the titres of IgG against early antigen were found to be useful markers for the diagnosis of different histopathological types of nasopharyngeal carcinoma. Author.

Tracheostomy in children—the Red Cross War Memorial Children's Hospital experience 1980–1985. Prescott, C. A., Vanlierde,

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M. J. Department of Otolaryngology, University of Cape Town Medical School, R.S.A. *International Journal of Pediatric Otorhinoryngology* 1989 May, Vol. 17 (2), pp. 97–107.

During the six years (1980-1985) at The Red Cross Children's Hospital 293 children required a tracheostomy during treatment of a variety of disorders. Of these children 44 per cent were under one year of age. Indications are discussed of which the commonest was LTB. Of the 3500 children seen with laryngotracheobronchitis (LTB) 4.6 per cent had a tracheostomy-28 per cent of those requiring airway intervention. Overall 67 per cent of the children were decannulated within 10 weeks and 92 per cent within a year. For 56 per cent one or more further procedures prior to decannulation were required, including 34 children who required a laryngotracheoplasty. Obstructing stomal granulation tissue had to be removed from 51 children and suprastomal collapse was a cause of decannulation failure in 52 children. Use of an expiratory valve as an aid to decannulation is discussed. Five children died of tracheostomy airway complications and 25 children of a medical disorder. One complication, laryngeal incompetence, was particularly associated with herpetic laryngeal ulceration. Staphylococcus aureus and Hemophilus influenzae were the main organisms cultured in the early weeks, with Pseudomonas and Streptococcus species predominating later. Author.

Otitis media with effusion and habitual mouth breathing in Dutch preschool children. van Bon, M. J., Zielhuis, G. A., Rach, G. H., van den Broek, P. Department of Epidemiology, University of Nijmegen, The Netherlands. *International Journal of Pediatric Otorhinolaryngology* 1989 May, Vol. 17 (2), pp. 119–25.

Habitual mouth breathing (HMB) is defined as the habit of in- and exhabling (part of) the air through the mouth, when an individual is at rest and the nose is sufficiently free. It is postulated that HMB is a risk factor for otitis media with effusion (OME) in preschool children. The results are presented of a prospective cohort study on 253 three-year-old children, free from OME, with a follow-up period of three months, to determine the role of HMB in the etiology of OME. The risk ratio for OME of habitual mouth breathers, compared to nose breathers, was found to be 2.4 (95% confidence interval (C.I.): 0.99-5.70). Moreover, there is a clear and significant linear trend in the proportion of OME in three breathing categories: nose breathing, intermediate and mouth breathing. This relation remains after correction for confounding. It is concluded that HMB is a risk factor for OME. It is estimated that about 20 per cent of the incidence of OME is caused by HMB. The high incidence of OME means that HMB carries a great deal of impact. Suggestions are made for the prevention and treatment of HMB. Author.

Congenital absence of the nose: a case report. Cole, R. R., Myer, C. M., Bratcher, G. O. Department of Otolaryngology and Maxillofacial Surgery, University of Cincinnati Medical Center, OH. *International Journal of Pediatric Otorhinolaryngology* 1989 May, Vol. 17 (2), pp. 171–7.

Congenital absence of the nose (arhinia, congenital nasal atresia) is a rare anomaly which is infrequently described in the literature. Herein we present a case of congenital absence of the nose recently evaluated and treated at Children's Hospital Medical Center (CHMC), Cincinnati, OH. CT and MRI studies were obtained. To our knowledge, no such radiographic evaluations have been described in patients with congenital absence of the nose. In addition to complete absence of the anterior soft tissues of the nose, thin anterior and thick posterior atretic plates were present. MRI was useful in defining the nature of the soft tissue mass which filled the single hypoplastic nasal cavity. The lip, alveolus, and palate were remarkably well developed. A thorough investigation revealed no other congenital defects. At 15 days of life, because of the airway support required and the associated feeding difficulties, a nasal airway was created using a combination of sublabial, transpalatal and percutaneous approaches. Frequent home dilation of the surgically created opening has been successful in maintaining nasal patency thus allowing the patient to go without continuous stenting. Author.

Does node location affect the incidence of distant metastases in head and neck squamous cell carcinoma? Ellis, E. R., Mendenhall, W. M., Rao, P. V., Parsons, J, T., Spangler, A. E., Million, R. R. Department of Radiation Oncology, University of Florida College of Medicine, Gainesville. *International Journal of Radiation Oncology, Biology and Physics* 1989 Aug, Vol. 17 (2), pp. 293–7.

An analysis of 455 patients with head and neck carcinomas and clinically positive neck nodes who were treated with radiation therapy alone to their primary tumors (with or without a neck dissection) was conducted to determine the relative role of several prognostic factors in the subsequent development of distant metastases (DM). The factors analyzed were N stage, node location (upper neck only vs. lower with or without upper neck), T stage, primary site (oral cavity, oropharynx, nasopharynx, hypopharynx, supraglottic larynx), modified AJCC stage, and neck treatment. All patients were treated between 1964 and 1985 and had a minimum follow-up of two years. The N stage and node location were the most significant prognostic factors in the subsequent development of distant metastases. The incidence of distant metastases increased with increasing neck stage (N1, 11 per cent; N2, 18 per cent; N3, 27 per cent), and in four of five neck stages (N2B being the exception), the incidence of distant metastases was greater for those patients with metastatic adenopathy in the lower neck. The incidence of distant metastases by modified AJCC stage was 12/111 (11 per cent) for Stage III, 34/146 (23 per cent) for Stage IVA, and 41/198 (19 per cent) for Stage IVB. The primary site and T stage had little influence on the subsequent development of distant metastases. A multivariate analysis of the clinical factors confirmed the importance of neck stage and node location in estimating the probability of distant metastases. Control of disease above the clavicles and the addition of a neck dissection also significantly affected the chance of developing distant metastases. Author.

Exclusive radiation therapy: the treatment of early tonsillar tumors. Lusinchi, A., Wibault, P., Marandas, P., Kunkler, I., Eschwege, F. Institut Gustave Roussy, Villejuif, France. *International Journal of Radiation Oncology, Biology and Physics* 1989 Aug, Vol. 17 (2), pp. 273–7.

One hundred and ninety-three T1 or T2 tumors of the tonsillar region have been treated by exclusive external irradiation between 1970 and 1982. Seventy-five per cent of these tumors were classified as T2. There was no relationship between T and N stages. The nodal involvement was essentially linked to the macroscopic appearance of the tumor (superficial or nodular) and to the histology. The five-year survival rate of the whole population was 58 per cent. N stage and macroscopic appearance only influenced the survival. The local control was 88 per cent for T1, 79 per cent for T2. The main prognostic factors for local control were the histological type, with a 93 per cent local control rate for poorly differentiated tumors versus 73 per cent for well differentiated ones, and the macroscopic appearance, with an 83 per cent local control rate for nodular tumors versus 75 per cent for superficial ones. Superficial tumors spreading forward the anterior pilar have a higher local failure rate. All the patients' charts have been reviewed, and we observed a high percentage of marginal recurrences. The technique of irradiation, above all in case of a superficial tumor, must take into account the possibility of "geographic miss" and keep large safety margins. Author.

Pediatric nasopharyngeal carcinoma: long term follow-up of 29 patients. Pao, W. J., Hustu, H. O., Douglass, E. C., Beckford, N. S., Kun, L. E. Department of Radiation Oncology, St. Jude Children's Research Hospital, Memphis, TN 38101. *International Journal of Radiation Oncology, Biology and Physics* 1989 Aug, Vol. 17 (2), pp. 299–305.

Twenty-nine untreated children diagnosed with nasopharyngeal carcinoma were consecutively admitted to St. Jude Children's Research Hospital from 1962 to 1986. The age of the patients ranged from six to 19 years (median of 13) at diagnosis. Histologically, all had lymphoepithelioma. Patients were retrospectively staged in the American Joint Committee System. Disease extent was T1 (n = 5), T2 (n = 7), T3 (n = 9), T4 (n = 8; NO (n = 1), N2 (n = 7), N3 (n = 21). Two patients had distant metastasis (M1) on admission, both ultimately succumbed to their disease. Twentyseven patients were seen initially without metastatic disease: one received pre-irradiation vincristine, 17 were treated with concomitant radiotherapy and cyclophosphamide. From 1981 to the present, four patients received pre-irradiation and one received post-irradiation cisplatin-bleomycin, vinblastine (CDDP-BLEO-VLB) regimens. Four patients received radiotherapy alone. All patients completed chemotherapy and radiation therapy. Twentyfive patients had complete tumor clearance and four had a partial response, Overall, 14 patients are alive continuously without relapse with a median follow-up of 11 years (range 4 to 20). All patients who relapsed did so within 2 years postirradiation. Four

patients failed locally-all had advanced (T3-T4) local disease at presentation and three of the failures were at the margin of treatment portals. Thirteen patients failed with distant metastasis. The major prognostic factor in these patients was the local extent of disease. Among the 27 MO patients, all ten patients with T1-2 tumors are disease-free, whereas four of nine patients with T3 and two of eight patients with T4 tumors are alive and well. In the 16 patients who are long term survivors, eight have mild neck atrophy, two have shortening of the clavicles; except for one patient who required a neck brace for shoulder drop, all had normal function. Among the seven pre-pubertal patients who are long term survivors, three have decreased growth, including one with documented decreased growth hormone. Two patients developed irregular menstrual periods. One patient developed hypothyroidism, and another had a thyroid adenoma. One patient developed bleomycin pneumonitis and one patient who received pre- and post-irradiation chemotherapy died of laryngeal edema and fibrosis, in remission. Radiotherapy is the major modality in the therapy of childhood nasopharyngeal carcinoma. The long term toxicity of radiotherapy plus or minus chemotherapy is acceptable. In early stage tumors (T1-2, N1-2), radiotherapy alone (55-60 Gy) appears to be sufficient for disease control. Author.

Asymptomatic expansion of the mandible. Ward, T. O., Rooney, G. E. VA Medical Center, Dental Service, Milwaukee 53066. Journal of American Dentist Association 1989 Jul, Vol. 119 (1), pp. 169-70. Frequently, the first noticeable sign of an odontogenic myxoma is a slowly enlarging, painless expansion of the jaw. Spreading, loosening, and migration of teeth in the area commonly occur. In the early stages, the tumor is asymptomatic, and detection is made only by routine radiographs. Clinicians should be aware of the radiographic changes caused by this benign odontogenic tumor, and include it in their differential consideration of lesions presenting such changes in the jaws. A typical case of a fairly large odontogenic myxoma has been presented. The clinical, radiographic, and histological presentations have been discussed. The tumor was treated by en bloc resection with immediate bone and nerve reconstruction. The patient responded well to therapy and no tumors were found at the one year follow-up examination. Author.

Laryngeal papillomatosis: correlation between severity of disease and presence of HPV 6 and 11 detected by in situ DNA hybridisation. Quiney R. E., Wells, M., Lewis, F. A., Terry, R. M., Michaels, L., Croft, C. B. Department of Otolaryngology, Royal National Throat, Nose and Ear Hospital, London. *Journal of Clinical Pathology* 1989 Jul, Vol. 42 (7), pp. 694–8. A technique using a biotin-streptavidin polyalkaline phosphatase

A technique using a biotin-streptavidin polyalkaline phosphatase complex was applied to routinely fixed and processed biopsy specimens of laryngeal papillomata from 45 patients taken over the past 20 years to detect human papilloma virus (HPV) types 6 and 11. Two thirds of both adult and juvenile onset cases were positive for HPV 6 or HPV 11 or both. Five specimens of normal vocal cord epithelium were negative for HPV 6 and 11. The detailed clinical history, endoscopic findings, success of treatment and eventual prognosis were compared with the HPV state of biopsy material for each patient. Patients with multiple confluent lesions when first seen, whose histology showed florid koilocytosis and who had strongly positive reactivity for HPV 6 or 11 present in the surface epithelial cell nuclei, had a poor prognosis requiring multiple endoscopies to control their disease. Author.

The effects of acute and chronic alcoholism on tumor necrosis factor and the inflammatory response. Nelson, S., Bagby, G. J., Bainton, B. G., Summer, W. R. Department of Pulmonary/Critical Care Medicine, Louisiana State University Medical Center, New Orleans 70112. *Journal of Infectious Diseases* 1989 Sep, Vol. 160 (3), pp. 422–9.

Ethanol intoxication has been shown to suppress selected functions of the immune system, thereby compromising host defenses against bacterial infections. Because the macrophage secretory protein, tumor necrosis factor (TNF), plays a central role in the inflammatory cascade, the effect of acute and chronic alcoholism on lipopolysaccharide (LPS)-induced TNF activity was studied. Saline or ethanol was given intraperitoneally to normal or chronic alcoholic rats followed 30 min later by either intravenous or intratracheal LPS.Intravenous LPS caused a substantial increase in serum TNF at 90 min in both normal and chronic alcoholic rats. In marked contrast, peak serum TNF levels were significantly suppressed in normal and chronic alcoholic rats given an acute injection of ethanol. When LPS was instilled intratracheally into normal rats, high levels of TNF appeared in the bronchoalveolar lavage fluid. Similar levels of TNF were found in chronic alcoholic rats after intratracheal LPS. However, acute ethanol intoxication significantly inhibited LPS-induced TNF in bronchoalveolar lavage fluid. In a similar manner, acute ethanol intoxication, but not chronic alcohol consumption, markedly inhibited both systemic and intrapulmonary polymorphonuclear leukocyte aggregation in response to either intravenous or intratracheal LPS. Alcoholinduced inhibition of TNF is a potential mechanism of the antiinflammatory effects of ethanol. Author.

A prospective randomized double-blind study to evaluate the effect of dexamethasone in acute laryngotracheitis. Super, D. M., Cartelli, N. A., Brooks, L. J., Lembo, R. M., Kumar, M. L. Department of Pediatrics, Case Western Reserve University, Cleveland, Ohio 44109. *Journal of Pediatrics* 1989 Aug, Vol. 115 (2), pp. 323–9.

To determine whether a single dose of dexamethasone (0.6 mg/kg)is useful in the treatment of acute laryngotracheitis (croup), 29 hospitalized patients with acute larvngotracheitis were randomly assigned in a double-blind fashion to receive either parenterally administered dexame thas one (n = 16) or a saline place bo (n = 13). Severity of the illness was assessed by a clinical croup score based on retractions, stridor, air entry, cyanosis, and level of consciousness. Twelve hours from the time of injection, the patients receiving the dexamethasone had a statistically significant decline in median croup score from 4.5 to 1.0 (p less than 0.001), whereas the patients receiving the placebo did not. By 24 hours, a decline of two or more points in the total croup score was noted in 85 per cent of the patients in the dexamethasone group compared with 33 per cent of the patients in the placebo group (p = 0.027). During this same period, only 19 per cent of patients receiving dexamethasone required two or more racemic epinephrine treatments in comparison with 62 per cent of patients who received the placebo (p less than 0.05). There was not statistical difference between the two groups in improvement in oxygen saturation, respiratory rates, or duration of hospitalization. We conclude that dexamethasone is beneficial in reducing the overall severity of moderate to severe acute laryngotracheitis during the first 24 hours after injection. Author.

A comparative electromyographic study of the lateral pterygoid muscle and arthrography in patients with temporomandibular joint disturbance syndrome sounds. Liu, Z. J., Wang, H. Y., Pu, W. Y. Department of Oral Anatomy and Physiology, Fourth Military Medical University, Xian, People's Republic of China. *Journal of Prosthetic Dentistry* 1989 Aug, Vol. 62 (2), pp. 229–33.

To explore the relationships among dysfunction of the two heads of lateral pterygoid muscle, temporomandibular joint (TMJ) internal derangement, and the mechanism of TMJ sounds, a comparative study was undertaken with electromyography of the two heads of the muscle and arthrography in 38 patients with temporomandibular joint disturbance syndrome sounds. Results suggested that the electromyograph shows various characteristics of dysfunction, when compared with the electromyograph of normal adults, that are significantly relevant to temporomandibular joint internal derangement, especially anterior disk displacement with reduction and without reduction. The mechanism of sounds was further explained on the basis of the observation of this study. Summing up the data, the authors propose that the dysfunction of the superior head of the muscle is one cause of temporomandibular anterior disk displacement. Author.

Psycho-behavioral characteristics of children with vocal nodules WPBIC ratings. Green, G. Curtin University of Technology, Perth, Western Australia. *Journal of Speech and Hearing Disorder* 1989 Aug, Vol. 54 (3), pp. 306–12.

The parents of 30 children referred to speech pathology because of vocal nodules completed the Walker Problem Behavior Identification Checklist (WPBIC) on their children. These checklist responses were then compared to those from the parents of a matched, vocally normal, control group. The nodule children had significantly higher scores on the scales for acting out, distractibility, disturbed peer relations, and immature behaviors. The implications of these results for nodule formation and intervention are discussed. Author.

Are delayed evoked oto-acoustic emmissions (DEOE) solely the out-

ABSTRACT SELECTION

come of an active intracochlear mechanism? Rossi, G., Solero, P., Rolando., M, Olina, M. Institute of Audiology, University of Turin, Italy. *Scandinavian Audiology* 1989, Vol. 18 (2), pp. 99–104. Post-mumps and post-measles hearing losses are a result of the destruction of Corti's organ. Both the basilar and the Reissner membrane are unimpaired. In 11 subjects with post-mumps (8 cases) and post-measles (3 cases) unilateral anacusis, DEOE with a mean amplitude lower than that of the contralateral normal ear with the same sensation level were observed with 0.5, 1 and 2 kHz tone-bursts and air conduction stimulation. These findings lend credit to the view that DEOE could in part be produced by a passive intracochlear mechanism, probably a consequence of the basilar membrane travelling wave induced by the displacement of the perilymph. In a normal ear, this passive mechanism could be superimposed by an active mechanism linked to the contractile activity of the outer hair cells (OHC) which modulates and increases the travelling wave depth. Author.

Calcified acoustic neuroma. Beskin, R. R., Eick, J. J. Department of Radiology, Ochsner Clinic, New Orleans, La 70121. Southern Medical Journal 1989 Aug, Vol. 82 (8), pp. 1048–50.

As our case indicates, it should be kept in mind that calcification, though unusual, does occur in acoustic neuromas. The statistical tendency of acoustic neuroma and meningioma to have different signal characteristics on magnetic resonance imaging may make MRI useful in increasing specificity in preoperative diagnosis. Author.

Metastatic laryngeal carcinoma as a cause of progressive ophthalmoplegia. Weig, S. G., Howard, J. F. Jr., Fry. T. Department of Neurology, University of North Carolina School of Medicine, Chapel Hill. Southern Medical Journal 1989 Aug, Vol. 82 (8), pp. 1051–2. We have described a patient with primary laryngeal carcinoma who

We have described a patient with primary laryngeal carcinoma who had bilateral progressive ophthalmoplegia. Repeated studies of cerebrospinal fluid and initial radiologic examinations failed to provide a diagnosis. Sphenoidal sinusotomy and biopsy were necessary to confirm the diagnosis of metastatic laryngeal carcinoma—a previously unreported phenomenon. Author.

Hoarseness following brachial plexus block. West Indian Medical Journal 1989 Jun, Vol. 38 (2), pp. 116-7.

A case is described in which the patient developed hoarseness following a left brachial plexus block, using the supraclavicular approach. Possible paralysis of the left recurrent laryngeal nerve is discussed. Author.