

Abstract Selection

Multimodal evoked potentials in neuro-Behçet: a longitudinal study of two cases. Rizzo, P. A., Valle, E., Mollica, M. A., Sanarelli, L., Pozzessere, G. Institute of Clinical Neurology, La Sapienza University, Rome, Italy. *Acta Neurologica Scandinavica* 1989 Jan, Vol. 79 (1), pp. 18-22.

Two neuro-Behçet patients have been studied, over a period of several months, by means of peroneal and median somatosensory (SEP), brainstem auditory (BAEP), and visual (VEP) -evoked potentials. In both patients, peroneal SEP showed evidence of a pathological reduction in the central conduction velocity without a related deep sensation impairment, while VEP changes were consistent with the visual disorders. Conversely, BAEP and median SEP findings did not show disease-related abnormalities. The observed anomalies were detectable irrespective of the clinical phase of the disease. Thus, evoked potential assessment is useful in providing objective evidence for evaluating and monitoring CNS damage in neuro-Behçet's syndrome. Author.

Tracheal dilatation followed by stenosis in Mounier-Kuhn syndrome. A case report. Messahel, F. M. Department of Anaesthesia and Intensive Care, King Khalid University Hospital, Riyadh, Saudi Arabia. *Anaesthesia* 1989 Mar, Vol. 44 (3), pp. 227-9.

A patient with previously undiagnosed Mounier-Kuhn syndrome (tracheobronchomegaly) was admitted with a head injury after a fall. The trachea was intubated with an oral tracheal tube with high-volume low-pressure cuff. The intracuff pressure was within the normal safe range recommended by the manufacturer. However, the patient developed tracheal dilatation on the second day after intubation. The trachea was extubated on the 15th day, and it was noticed 48 hours later that the patient was developing a tracheal stenosis at the site of the previous dilatation. The stenosis was so severe that the patient underwent resection-anastomosis surgery of his stenotic tracheal segment two months after extubation. It may be preferable in patients with Mounier-Kuhn syndrome who require mechanical ventilation to intubate the trachea with an uncuffed tube and to pack the throat to decrease the chances of gas leak and inhalation. Author.

Laryngeal anaesthesia with aspiration following intubation. Aucott, W., Prinsley, P., Madden, G. Royal Free Hospital, London. *Anaesthesia* 1989 Mar, Vol. 44 (3), pp. 230-1.

Two patients who had undergone emergency tracheal intubation developed signs of aspiration of ingested food. Nasendoscopy demonstrated supraglottic anaesthesia which recovered from the laryngeal margins in towards the vocal cords. It is assumed that this was caused by a neuropraxia of the internal branch of the superior laryngeal nerve, presumably as a result of trauma related to intubation. Author.

Malignant tumors of the external ear. Leferink, V. J., Nicolai, J. P. Regional Center for Plastic and Reconstructive Surgery, Arnhem, The Netherlands. *Annals of Plastic Surgery* 1988 Dec, Vol. 21 (6) pp. 550-4.

Although only a few of the malignant tumours of the skin develop in the external ear, they are more frequent than one would expect. These tumours recur and develop metastases more often than tumours in other sites. Because of this and because of surrounding vital structures, these tumours have a poor prognosis. Surgical therapy, that is, wide excision, is better than radiotherapy. Many methods for reconstruction of the external ear have been published, and sometimes plastic prostheses are acceptable. From 1982 to 1986, 17 patients with malignant tumours of the external ear were treated in our centre. There were 15 men and two women. The mean age was 73 years. There were four basal cell and 12 squamous cell carcinomas, and one patient had malignant melanoma of the external ear. Nine of these tumours were on the helix. During the follow-up period, six patients had local recurrent

disease. In seven patients, re-excision had to be performed several times after incomplete excision. Six patients are alive without any sign of the disease, and three patients died. Author.

Candidal sinusitis and diabetic ketoacidosis. A brief report. Dooley, D. P., McAllister, C. K. Department of Medicine, Brooke Army Medical Center, Fort Sam Houston, TX 78234-6200. *Archives of Internal Medicine* 1989 Apr, Vol. 149 (4), pp. 962-4.

A 55-year-old man presented with diabetic ketoacidosis and pansinusitis due to infection with *Candida albicans*. The infection responded to local drainage procedures, the administration of amphotericin B (2 g), and aggressive medical therapy of the ketoacidosis. Sinusitis due to *C. albicans* is rare but may be more frequently seen in the immunocompromised host. Unlike those infections caused by *Mucor* or *Aspergillus* species, sinusitis due to *C. albicans* may respond to local drainage and amphotericin B therapy. Author.

The association of posterior capsular lens opacities with bilateral acoustic neuromas in patients with neurofibromatosis type 2. Kaiser-Kupfer, M. I., Freidlin, V., Datiles, M. B., Edwards, P. A., Sherman, J. L., Parry, D., McCain, L. M., Eldridge, R. Clinical Branch, National Eye Institute, Bethesda, MD 20892. *Archives of Ophthalmology* 1989 Apr, Vol. 107 (4), pp. 541-4.

This study of 47 patients from 11 families with neurofibromatosis type 2 (NF 2) confirms our previously reported association between posterior capsular cataract and NF 2. A highly significant statistical association was found between the presence of posterior capsular lens opacities and the presence of NF 2 as determined by magnetic resonance imaging or pathologic diagnosis. This association was not present for other types of lens opacities that could be the result of age-related or nonspecific changes. When considering the diagnosis of NF 2, this finding now makes it essential to use a careful dilated biomicroscopic examination of the lens to evaluate known, suspected, or at-risk individuals for this potentially early associated manifestation. Author.

Dietary restriction and presbycusis: periods of restriction and auditory threshold losses in the CBA/J mouse. Sweet, R. J., Price, J. M., Henry, K. R. Department of Psychology, University of California, Davis. *Audiology* 1988, Vol. 27 (6), pp. 305-12.

Dietary restriction was imposed on CBA/J mice, animals which develop presbycusis late in their lives. Animals restricted for their whole lives, as well as those restricted after midlife, had less presbycusis than did control mice fed ad libitum. Dietary restriction did not increase the life spans of these mice. Restriction until midlife did not protect from presbycusis, nor did it increase life span. In this genotype, dietary restriction protects against hearing loss only if it occurs at the age of most rapid decline of cochlear function. Author.

Temporal effects in simultaneous pure-tone masking in subjects with high-frequency sensorineural hearing loss. Bacon, S. P., Hedrick, M. S., Grantham, D. W. Division of Hearing and Speech Sciences, Vanderbilt University School of Medicine, Nashville, Tenn. *Audiology* 1988, Vol. 27 (6), pp. 313-23.

Temporal effects in simultaneous pure-tone masking were studied in three subjects with a high-frequency sensorineural hearing loss. The masker level was generally 80 dB SPL, and the signal level was varied adaptively to threshold. Masker frequency was always 1.2 times the signal frequency, and three different frequency regions were studied: (1) signal and masker in region of normal hearing; (2) signal in region of normal hearing and masker in region of hearing loss; and (3) signal and masker in region of hearing loss. In the first experiment, the masker was either gated synchronously with the 20-ms signal or was presented continuously. The gated-continuous threshold difference was largest when both the masker and signal

were in a region of normal hearing; that difference decreased, though was not eliminated, when either the masker or the signal-plus-masker was in a region of hearing loss. In the second experiment, threshold was measured for the 20-ms signal as a function of its temporal position within a 400-ms masker. Consistent with the first experiment, the biggest change in masking over time generally occurred when the signal and masker were in a region of normal hearing. These data suggest that the mechanisms responsible for temporal effects in normal-hearing subjects (and in regions of normal hearing in subjects with a hearing loss) are adversely affected by (even a mild) sensorineural hearing loss. Moreover, these data suggest that what may be most important for a normal temporal effect is the integrity of the frequency region where the masker is presented. Author.

Clinical applicability of insert earphones for audiometry. Borton, T. E., Nolen, B. L., Luks, S. B., Meline, N. C. Department of Surgery, University of Alabama, Birmingham. *Audiology* 1989, Vol. 28 (2), pp. 61–70.

Insert transducers for audiometry are available which may offer significant advantages over older 'standard' headphones. Clinicians have remained cautious in using such devices due to the paucity of experimental data demonstrating their comparability with more widely used devices. The purpose of this investigation was to compare and contrast pure-tone audiometric thresholds obtained using insert earphones with those measured utilizing conventional supra-aural transducers in normal and hearing-impaired subjects. A second purpose was to examine the differential effects on the hearing threshold level of two coupling systems for the insert device. There were no clinically significant differences among pure-tone thresholds measured with the three earphone/coupler arrangements for subjects with normal and impaired hearing. Advantages and limitations of insert earphones are discussed. Author.

Space motion sickness during 24 flights of the space shuttle. Davis, J. R., Vanderploeg, J. M., Santy, P. A., Jennings, R. T., Stewart, D. F. Medical Operations Branch, NASA-Johnson Space Center, Houston, Texas 77058. *Aviation, Space and Environmental Medicine* 1988 Dec, Vol. 59 (12), pp. 1185–9.

The incidence and severity of Space Motion Sickness (SMS) were determined from 24 flights of the Space Shuttle. A standardized questionnaire developed at the NASA-Johnson Space Center (JSC) was administered to all crewmembers postflight during an oral debriefing with the examining flight surgeon. Cases of SMS were graded mild, moderate or severe using criteria developed at the JSC. The incidence of SMS during a first Shuttle flight for 85 crewmembers was 67% (57 cases). There were 26 mild cases (30%), 20 moderate (24%), and 11 severe (13%). Differences were found between males and females, crew positions (Commander, Pilot, Mission Specialist, etc.), and age groups, which were not statistically significant (p greater than 0.05), but would suggest future research into the mechanism, prevention, and treatment of SMS. The 26 crewmembers with a second flight showed a reduction in SMS incidence to 46%, but the change was not significant compared with the first flight. Nine crewmembers (35%) showed a reduction in SMS severity comparing first and second flights, yet there was no significant difference in the mean time between flights for crewmembers with SMS versus asymptomatic crewmembers. Variability in crewmember training and flight experience may explain some of the differences observed. Author.

HLA class I gene expression on human primary tumours and autologous metastases: demonstration of selective losses of HLA antigens on colorectal, gastric and laryngeal carcinomas. Lopez-Nevot, M. A., Esteban, F., Ferron, A., Gutierrez, J., Oliva, M. R., Romero, C., Huelin, C., Ruiz-Cabello, F., Garrido, F. Servicio de Analisis Clinicos, Hospital Virgen de las Nieves, Granada, Spain. *British Journal of Cancer* 1989 Feb, Vol. 59 (2), pp. 221–6.

The expression of HLA class I antigens was studied in 99 primary tumours (colorectal, gastric and laryngeal carcinomas) and 57 autologous metastases using immunohistological techniques and monoclonal antibodies against class I monomorphic determinants, HLA-B isotypic determinants and HLA polymorphic determinants. Fourteen per cent of colorectal, 9.6% of gastric and 20% of laryngeal carcinomas completely lacked class I molecules. Selective losses of HLA-B antigens were also detected in 8.8, 3.4 and 5.8% of these tumours respectively. Taking into account com-

plete and selective loss of HLA-B the average alteration in the class I molecules expression totalled 21%. The comparison of class I expression between primary tumours and autologous metastases showed differences in 24% of the patients. These differences consisted mainly in a decrease of class I expressions by metastases. Nevertheless, four types of divergence were detected in laryngeal carcinomas, namely: +/-, +/+, -/+, -/-. In addition, a clear correlation between degree of differentiation and class I expression was observed in laryngeal tumours. Finally, when class I gene RFLPs were compared with DNA from 15 tumours and autologous normal mucosa or peripheral lymphocytes, no differences were detected between these samples. Author.

Evaluation of responses following irradiation of juvenile angiofibromas. Robinson, A. C., Khoury, G. G., Ash, D. V., Daly, B. D. University Department of Radiotherapy, Cookridge Hospital, Leeds. *British Journal of Radiology* 1989 Mar, Vol. 62 (735), pp. 245–7.

Ten cases of angiofibromas treated by irradiation are reported. Relief of symptoms occurred by the end of treatment in eight patients. Objective regression was much slower, six having visible disease for greater than six months and four for at least one year. Only one was symptomatic. Radiological resolution lagged behind clinical improvement and was complete in only one of three asymptomatic patients evaluated by computed tomography (CT) at between two and three years after treatment. The significance of these residual masses seen on CT is unclear. Author.

Human papillomavirus 6/11 and 16/18 in Schneiderian inverted papillomas. *In situ* hybridization with human papillomavirus RNA probes. Brandwein, M., Steinberg, B., Thung, S., Biller, H., Dilorenzo, T., Galli, R. Lillian and Henry M. Stratton-Hans Popper Department of Pathology, Mount Sinai School of Medicine, New York, NY 10029. *Cancer* 1989, 1 May Vol. 63 (9), pp. 1708–13.

Schneiderian inverted papillomas may be troublesome lesions for clinicians with propensity for recurrences. Dysplasia is not uncommonly seen, and some of these lesions do progress to develop squamous carcinoma. The authors hybridized *in situ* seven inverted papillomas with RNA probes to human papillomavirus (HPV) 6, 11, 16, and 18. Four of these contained dysplasia, two were without dysplasia, and one contained invasive squamous cell carcinoma. Five inverted papillomas showed evidence of HPV infection based on hybridization. One with mild to moderate and one with severe dysplasia, and one without dysplasia hybridized with mixed probe HPV 6/11. One with mild dysplasia and one associated with invasive squamous cell carcinoma hybridized with mixed probe HPV 16/18. One inverted papilloma without dysplasia and one with severe dysplasia did not definitively hybridize with either mixed probe. These findings raise interesting questions as to role of HPV 6/11 and 16/18 in the development of inverted papillomas, and probably on the progression to and carcinoma. Author.

Adjuvant chemotherapy for advanced nasopharyngeal carcinoma in childhood. Kim, T. H., McLaren, J., Alvarado, C. S., Wyly, J. B., Crocker, I., Winn, K., Singhapakdi, S., Ragab, A. Department of Pediatrics, Emory University School of Medicine, Atlanta, Georgia 30322. *Cancer* 1989, 15 May, Vol. 63 (10), pp. 1922–6.

Seven children with advanced nasopharyngeal carcinoma younger than 20 years of age diagnosed between 1975 and 1986 (inclusive) were treated with a uniform adjuvant chemotherapy regimen, which consisted of vincristine (1.5 mg/m²; day 1), doxorubicin (45 mg/m²; day 1), 5-fluorouracil (8 mg/kg; days 1 through 5), and cyclophosphamide (7 mg/kg; days 1 through 5). This combination chemotherapy was given for 12 to 24 months after completion of radiation therapy. The radiation doses to the primary sites ranged from 6000 cGy to a maximum of 6800 cGy. The radiation doses for neck prophylaxis ranged from 4500 cGy to a total of 5000 cGy. Involved sites were irradiated to at least an additional boost of 1000 cGy. One patient had an external dose 6000 cGy to the primary site boosted with brachytherapy of 3000 cGy at the surface of an ovoid. After chemotherapy myelosuppression occurred in all patients and was tolerable. All seven patients are surviving, six disease-free, for 22 months to 12 years (median, 4 years). This study suggests that the combination of radiation therapy and chemotherapy as used here has acceptable toxicity and is effective and further suggests that children with nasopharyngeal carcinoma, even in its advanced stage at diagnosis, may be curable. Author.

Selective left endobronchial suctioning in the intubated patient. Panacek, E. A., Albertson, T. E., Rutherford, W. F., Fisher, C. J., Foulke, G. E. Case Western Reserve University, Department of Medicine, Cleveland 44106. *Chest* 1989 Apr, Vol. 95 (4), pp. 885-7.

Suctioning of secretions from the left endobronchial tree is frequently necessary but often difficult in intubated patients. We examined the effectiveness of a catheter designed expressly for this purpose. Special curved tip (Bronchitrac-L) suction catheters were fitted with thin, radiopaque tubing to facilitate X-ray visualization. Eight-one attempts at left endobronchial placements were made on 74 stable adult intensive care unit patients. The suction catheter was inserted into the oral endotracheal tube or tracheostomy tube prior to an X-ray filming of the chest. In 15 of 66 patients, the tip of the oral endotracheal tube was too distal (less than 2 cm above the carina) to allow proper functioning of the catheter. Patients with a properly positioned oral endotracheal tube were analysed separately and showed 56% of the catheters went to the left bronchus. When the head was turned to the left prior to placement, successful left bronchus placement occurred in 65%. When the catheter was placed through a tracheostomy tube, 100% went into the left bronchus (n = 15). There were no catheter-induced complications in this study. The curved tip catheter is an effective means of suctioning the left bronchial tree in patients with tracheostomy tubes. Its reliability in patients with oral endotracheal tubes is reduced but more effective than current methods. Author.

Nd-YAG laser-induced endobronchial burn. Management and long-term follow-up. Krawtz, S., Mehta, A. C., Wiedemann, H. P., DeBoer, G., Schoepf, K. D., Tomaszewski, M. Z. Department of Pulmonary Disease, Cleveland Clinic Foundation. *Chest* 1989 Apr, Vol. 95 (4), pp. 916-8.

Endobronchial fires are a rare complication of Nd-YAG laser photoresection. Short-term morbidity is secondary to sloughing mucosa and mucous plugging. Aggressive pulmonary hygiene, including frequent bronchoscopies and possibly a tracheostomy, may be required. The major long-term complication is obstruction of the airways from granulation tissue. Long-term follow-up is required to evaluate and treat clinically significant granulation tissue in the airways. Author.

Effective hyposensitization in allergic rhinitis using a potent partially purified extract of house dust mite. Ewan, P. W., Alexander, M. M., Snape, C., Ind, P. W., Agrell, B., Dreborg, S. *Clinical Allergy and Immunology* 1988 Sep, Vol. 18 (5), pp. 501-8.

Thirty-eight adults with allergic rhinitis have been treated with a new partially purified extract of house dust mites (*Dermatophagoides pteronyssinus*) in a double-blind placebo-controlled trial. Patients were randomised to active (Pharmalgen, *D. pteronyssinus*) and placebo (histamine) treatment by sensitivity to *D. pteronyssinus* on nasal challenge. In the actively treated group nasal symptoms, assessed by visual analogue score, improved (P less than 0.01), sensitivity on nasal challenge with allergen was reduced (P less than 0.05) and weal size on skin-prick test with allergen was reduced (P less than 0.01), compared with the placebo group. These results occurred after three months of treatment. Reduction in target organ sensitivity occurred, while the serum level of *D. pteronyssinus* IgE rose in the active group from 14.2 to 22.5 PRU/ml (geometric mean) but did not change significantly in the placebo group. As anticipated, because of the treatment schedule used, a number of generalized allergic reactions were induced by injections, but all responded promptly and easily to treatment. These results suggest this is an effective form of therapy, which now offers us the opportunity to study the immunological mechanisms of hyposensitization and to devise a modified schedule causing fewer reactions. Author.

Rigid internal fixation and vascularized bone grafting in mandibular reconstruction. Wenig, B. L., Keller, A. J. Division of Head and Neck Surgery, University of Illinois College of Medicine, Chicago. *Clinics in Plastic Surgery* 1989 Jan, Vol. 16 (1), pp. 125-31.

The technique of mandibular reconstruction utilizing rigid internal fixation and vascularized bone grafts has been described. This type of repair should be considered in all patients undergoing mandibular resection for head and neck malignancies. Although no ideal method of reconstruction has yet been described, it appears that rigid internal fixation combined with vascularized bone grafts most

satisfactorily fulfils the requirements associated with reconstruction of jaw defects. Author.

Spontaneous cerebrospinal fluid otorrhea in a deaf infant. Ryczko, B., Brodsky, L., Stanievich, J. F., Pordell, R. Department of Otolaryngology, State University of New York at Buffalo, School of Medicine, Children's Hospital of Buffalo. *International Journal of Pediatric Otorhinolaryngology* 1988 Dec, Vol. 16 (3), pp. 245-51.

Spontaneous (congenital) cerebrospinal fluid (CSF) otorrhea is a rare occurrence with less than 100 cases being reported in the literature. In infants and children, it may present as otitis media with effusion. A four-month-old infant, who was diagnosed with severe to profound sensorineural hearing impairment and spontaneous CSF otorrhea, initially presented with otitis media with effusion. The patient presentation, diagnostic dilemmas and pathophysiology of this rare but interesting problem are discussed. Author.

Positive clinical experience with misonidazole in brachytherapy and external radiotherapy. Baillet, F., Housset, M., Dessard-Diana, B., Boisserie, G. Centre de Traitement des Tumeurs, Hopital Necker, Paris, France. *International Journal of Radiation Oncology, Biology and Physics* 1989 Apr, Vol. 16 (4), pp. 1073-5.

We performed a clinical evaluation of Misonidazole (MISO) radiosensitization in brachytherapy and two schedules of hypofractionated external radiotherapy in three non-randomized studies. MISO (1 g/m²/d) was administered to patients with ENT tumours treated by brachytherapy, two applications of 36 Gy each with an interval of one month. For 46 patients with tumour responses less than 50% (in the largest dimension) at time of second application, 21 received MISO and 25 did not. For these poorly radiosensitive tumours, the addition of MISO significantly increased the rate of complete remission from 9/25 (36%) in controls to 14/21 (67%) (p less than 0.05). We studied MISO with radiation hypofractionation for conservative breast cancer with four fractions over 17 days (5 Gy on days 1, 3 and 6.5 Gy on days 15 and 17). Brachytherapy alone was delivered three weeks later. MISO (1 g/m²/d) was given to 38 patients with 87 acting controls. Radiosensitization was measured by mean tumour diameter at brachytherapy, which showed a residual mass of 33% in the group without MISO and only 17% in the group with MISO (p less than 0.05). We also studied MISO with radiation hypofractionation for large ENT tumours with 14 fractions over 45 days, two sessions with a four-hour interval per day for totals of 6 Gy on days 1 and 3; 8 Gy on days 15, 17, 29, 31; and 6 Gy on day 45. MISO (1 g/m²/d) was given to 49 patients with 21 acting as controls. MISO increased the rate of complete remission from 7/21 (33%) in controls to 32/49 (65%) (p less than 0.02). Author.

Misonidazole combined with split-course radiotherapy in the treatment of invasive carcinoma of larynx and pharynx: report from the DAHANCA 2 study. Overgaard, J., Hansen, H. S., Andersen, A. P., Hjeltn-Hansen, M., Jorgensen, K., Sandberg, E., Berthelsen, A., Hammer, R., Pedersen, M. Danish Cancer Society, Department of Experimental Clinical Oncology, Aarhus. *International Journal of Radiation Oncology, Biology and Physics* 1989 Apr, Vol. 16 (4), pp. 1065-8.

Between October 1979 and May 1985, 626 patients with pharynx and larynx carcinoma were randomized to two different split-course radiation regimens and given either misonidazole (MISO; 11 g/m²) or placebo during the initial four weeks of treatment. Patients in the different treatment groups were evenly distributed among stages. The small number of females (136) gave an uneven distribution, thus making analysis difficult. The results show that females had a statistically better loco-regional control (45 vs. 33%; five-year actuarial value). Overall, the MISO treated group did not have a significantly better control rate than the placebo groups (37 vs. 34%). However, a difference was found in patients with pharynx carcinomas (38 vs. 27%; p less than 0.05). The pre-irradiation haemoglobin (Hb) concentration was found to be a prognostic parameter. In females, loco-regional control for Hb values below or above 8 mmol/l were 37 and 47%, respectively. In males, the same values were below or above 9 mmol/l 26 and 38%. Hb influence on local control was only seen in supraglottic and pharynx tumours. This effect was independent of tumour size, which also was of prognostic value. In addition Hb concentration and MISO had an apparent additive effect. Thus in the male pharynx group,

placebo patients with low Hb had a 14% disease rate compared to 40% in MISO treated patients with Hb above 9 mmol/l MISO induced significant peripheral neuropathy in 26% of the treated patients, whereas other drug related side effects were minimal and tolerable. Author.

Acquired immune deficiency syndrome presenting as a palatal perforation. Fowler, C. B., Nelson, J. F., Henley, D. W., Smith, B. R. Department of Oral Pathology, Wilford Hall USAF Medical Center, Lackland AFB, Texas. *Oral Surgery, Oral Medicine, Oral Pathology* 1989 Mar, Vol. 67 (3), pp. 313–8.

Head and neck manifestations are particularly frequent in the acquired immune deficiency syndrome. An unusual case of acquired immune deficiency syndrome in a female prostitute whose initial presentation included a palatal perforation is reported. This case is also noteworthy because the patient died of disseminated miliary tuberculosis, a disease only recently included in the Centers for Disease Control case definition of AIDS. Author.

Recognition and management of invasive pharyngeal candidiasis in acute leukemia. Barrett, A. P. Westmead Hospital Dental Clinical School, New South Wales, Australia. *Oral Surgery, Oral Medicine, Oral Pathology* 1989 Mar, Vol. 67 (3), pp. 275–8.

Invasive fungal infection is a potentially fatal complication in severely neutropenic patients with acute leukemia. Two cases are presented to demonstrate specific clinical signs and symptoms that should alert the clinician to the possibility of aggressive invasive candidiasis of the oropharynx. Author.

Acute otitis media and respiratory virus infections. Ruuskanen, O., Arola, M., Putto-Laurils, A., Mertsola, J., Meurman, O., Viljanen, M. K., Halonen, P. Department of Pediatrics, University of Turku, Turku University Hospital, Finland. *Pediatric Infectious Diseases* 1989 Feb, Vol. 8 (2), pp. 94–9.

We studied the association of acute otitis media with different respiratory virus infections in a pediatric department on the basis of epidemics between 1980 and 1985. Altogether 4524 cases of acute otitis media were diagnosed. The diagnosis was confirmed by tympanocentesis in 3332 ears. Respiratory virus infection was diagnosed during the same period in 989 patients by detecting viral antigen in nasopharyngeal mucus. There was a significant correlation between acute otitis media and respiratory virus epidemics, especially respiratory syncytial virus epidemics. There was no significant correlation between outbreaks of other respiratory viruses and acute otitis media. Acute otitis media was diagnosed in 57% of respiratory syncytial virus, 35% of influenza A virus, 33% of parainfluenza type 3 virus, 30% of adenovirus, 28% of parainfluenza type 1 virus, 18% of influenza B virus and 10% of parainfluenza type 2 virus infections. These observations show a clear association of respiratory virus infections with acute otitis media. In this study on hospitalized children *Haemophilus influenzae* strains were the most common bacteriologic pathogens in middle ear fluid, occurring in 19% of cases. *Streptococcus pneumoniae* was present in 16% and *Branhamella catarrhalis* in 7% of cases. There was no association between specific viruses and bacteria observed in this study. Author.

Larynx: MR imaging at 2.35 T. Kikinis, R., Wolfensberger, M., Boesch, C., Martin, E. Department of Magnetic Resonance, Children's Hospital, Zurich. *Radiology* 1989 Apr, Vol. 171 (1), pp. 165–9.

To study the consequences of an improvement in spatial resolution, the authors compared magnetic resonance (MR) images of nine laryngeal specimens with whole-organ histologic slides of the same specimens. Five of the specimens were obtained during laryngectomies performed on patients with high-stage tumours of the larynx. Four specimens were from patients with no known disease. The MR images were obtained on a 2.35-T system with a closely fitting probe head. A conventional spin-echo sequence was used, with T1- and T2-weighted settings. The in-plane resolution obtained was about 0.3 mm. The T2-weighted images generally showed better contrast and allowed identification of the perichondrium. The resolutions used were not much greater than those clinically available. The findings suggest that there will be important advances in clinical MR imaging of the larynx in the near future. Author.

Advanced laryngeal cancer: sonographic assessment. Gritzmann, N., Traxler, M., Grasl, M., Pavelka, R. Department of Radiology, University of Vienna, Austria. *Radiology* 1989 Apr, Vol. 171 (1), pp. 171–5.

Endoscopy permits visualization of the endolaryngeal spread of laryngeal tumours, yet the depth of tumour infiltration often remains unclear. The authors used high-resolution sonography in 37 patients with advanced laryngeal cancer to assess the tumours and the cervical lymph nodes. Sonographic findings were compared to operative and histologic reports. Sonography demonstrated histologically confirmed infiltration into the thyroid (n = 8) and cricoid cartilages (n = 1), preepiglottic space (n = 12), base of the tongue (n = 4), hypopharynx (n = 8), subglottic space (n = 3), and thyroid gland (n = 2). Except for the retrolaryngeal portion of the tumour, sonography was valuable in assessing extralaryngeal spread of advanced cancers. It enabled detection of subclinical lymph node metastases in four patients. Furthermore, invasion of the wall of the carotid artery was found in two patients. For evaluating the endolaryngeal and hypopharyngeal portions of the tumour, endoscopy remains mandatory. Author.

Acute upper airway obstruction in rheumatoid arthritis of the cricoarytenoid joints. Bamshad, M., Rosa, U., Padda, G., Luce, M. Department of Medicine, University of Missouri, Kansas City School of Medicine. *Southern Medical Journal* 1989 Apr, Vol. 82 (4), pp. 507–11.

We have reported two cases of acute, life-threatening upper airway obstruction due to previously unrecognized rheumatoid arthritis of the cricoarytenoid joints with severe acute and chronic deformities of the larynx. Attempted endotracheal intubation with the rigid laryngoscope failed in each case, resulting in the need for emergency tracheostomy. We recommend the use of the fiberoptic bronchoscope for elective or emergency endotracheal intubations in patients with severe rheumatoid arthritis involving the cervical spine and the larynx. Author.