Abstract Selection

Rhinolith: an unusual cause of palatal perforation. Flood, T. R. Department of Oral and Maxillofacial Surgery, Glasgow Dental Hospital and School. *British Journal of Oral and Maxillofacial Surgery* 1988 Dec, Vol. 26 (6), pp. 486–90.

An unusual case of a large rhinolith, which initially presented as an oronasal fistula, is reported. The surgical removal of the rhinolith through a maxillary osteotomy at the Le Fort I level with immediate direct fixation using 'Champy' plates is described. This approach provided excellent access for removal of the mass and repair of the oronasal fistula. Author.

Acquired angioedema. Postlethwaite, K. R., Parry, D. H. Department of Oral and Maxillofacial Surgery, Glan Clwyd Hospital, N. Wales. *British Journal of Maxillofacial Surgery* 1988 Dec, Vol. 26 (6), pp. 499–502.

An unusual case of angioedema is presented. The initial presentation occurred at 84 years-of-age without a family history of this condition. Further investigation revealed an underlying lymphoproliferative disorder which was associated with an acquired deficiency of the complement component C1 esterase inhibitor. It is important to distinguish this condition from the hereditary form.

The anterior cricoid split: the Children's Hospital of Philadelphia experience. Anderson, G. J., Tom, L. W., Wetmore, R. F., Handler, S. D., Potsic, W. P. Division of Otolaryngology and Human Communication, Children's Hospital of Philadelphia, PA 19104. *International Journal of Pediatric Otorhinolaryngology* 1988 Oct, Vol. 16 (1), pp. 31–8.

The anterior cricoid split procedure (ACS) is an alternative to tracheotomy in selected infants with subglottic stenosis. From February 1983 to October 1987, 26 children underwent ACS at the Children's Hospital of Philadelphia. All children had subglottic stenosis. Six children had previously undergone tracheotomy. A successful outcome, allowing extubation or decannulation, correlated only with decreased pre-operative intubation time and was achieved in 73 per cent of these patients. A failed ACS had little adverse affect on the subsequent management of these children. Author.

A prospective study of titanium ventilation tubes. Handler, S. D., Miller, L., Potsic, W. P., Wetmore, R. F., Marsh, R. R. Department of Otolarynology and Human Communication, Children's Hospital of Philadelphia, PA 19104. *International Journal of Pediatric Otorhinolaryngology* 1988 Oct, Vol. 16 (1), pp. 55–60.

A prospective controlled study was undertaken in which in 100 children a titanium ventilation tube was inserted in one ear, and a Paparella silicone tube was inserted in the contralateral ear as a control. The tubes were evaluated with respect to length of time of intubation, episodes of otorrhea, and early occluson. Sixty-five patients were followed for at least one year, or until both tubes had extruded. Long-term follow-up of these patients has revealed little difference in the incidence of tube occlusion, early extrusion, or infection with otorrhea. Since the titanium tube is more than twice as expensive and has no proven avantages over a silicone tube of similar design, we have no reason to recommend its use over the less costly, standard silicone ventilation tube. Author.

Arthrogryposis multiplex congenita; otolaryngologic diagnosis and management. Paugh, D. R., Koopman, C. F. Jr., Babyak, J. W. Department of Otolaryngology, University of Michigan Medical Center, Ann Arbor 48109. *International Journal of Pediatric Otorhinogology* 1988, Oct, Vol. 16 (1), pp. 45–53.

Arthrogryposis multiplex congenita (AMC) is an uncommon congenital disorder characterized by multiple fixed joint deformities and non-progressive neuromuscular dysfunction. A small fraction of these infants will present with otolaryngologic problems resulting from cranial nerve weakness, muscle dysplasia, or structural dysharmony of the head and neck. The charts of 50 patients with AMC were reviewed to determine the incidence of these findings. A summary of the literature is presented discussing the etiology, pathophysiology, diagnosis and management of this interesting clinical problem. Author.

Usher's syndrome, temporal bone pathology. Cremers, C. W., Delleman, W. J. Department of otorhinolaryngology, University of Nijmegen, The Netherlands. *International Journal of Pediatric Otorhinolaryngology* 1988 Oct, Vol. 16 (1), pp. 23–30.

The histological findings in the right temporal bone of a 65-year-old deaf and blind man are presented. The subject suffered from the autosomal recessive Usher's syndrome, as did two of his five siblings. They are the offspring of a consanguineous marriage. This man died from an intra-abdominal hemorrhage. Within three h after death the temporal bones were donated for study and were processed for histopathological examination. Author.

Cytologic changes in the nasal secretions during the immediate nasal response. Pelikan, Z., Pelikan-Filipek, M. Department of Allergology and Immunology, Institute of Medical Sciences De Klokkenberg, Breda, The Netherlands. *Journal of Allergy and Clinical Immunology* 1988 Dec, Vol 82 (6), pp. 1103–12.

In 102 randomly selected patients with allergic rhinitis caused by immediate hypersensitivity, nasal provocation tests (NPTs) with allergens were evaluated by means of rhinomanometry, and cytologic examination of the nasal secretions (NSs) was performed. The cells in NS of 117 positive immediate nasal responses (INRs) and in 68 negative INRs, correlating with history and skin tests, and in 102 control challenges with phosphate-buffered saline were stained by modified May-Grunwald-Giemsa, toluidine blue, and Hansel's method. The positive INR was accompanied by significant changes in the count of eosinophils (increase followed by decrease) in 67 per cent of neutrophils (decrease followed by increase) in 40 per cent, goblet cells (increase followed by decrease) in 41 per cent, and basophils (decrease) in 13 per cent of the NSs. No significant changes in the count of other types of cells in the NSs were recorded during most of the cases of INR. No significant changes in the count of individual cell types in NSs were found during most cases of negative INR. During the phosphatebuffered saline control challenges, the individual cell types appeared irregularly, and no significant changes in their count were recorded in any patient. The cytologic examination of NS, evoked by allergen, appears therefore to be a valuable supplementary diagnostic parameter for nasal allergy. The repeated counting of eosinophils in NS, before and after allergen challenge, appears to be the best way to discriminate between positive and negative nasal responses, since the eosinophils demonstrated significant changes in their count during 67 per cent of the positive and only 11 per cent of the negative INRs. Author.

Significance of opacification of the maxillary and ethmoid sinuses in infants. Glasier, C. M., Mallory, G. B. Jr., Steele, R. W. Department of Radiology, University of Arkansas for Medical Sciences, Little Rock. Journal of Pediatrics 1989 Jan, Vol. 114 (1), pp. 45-50. To evaluate the incidence and significance of radiographic sinus opacification in infants, we performed computed tomography (CT) of the maxillary and ethmoid sinuses in conjunction with routine cranial CT in 100 infants from birth to 12 months of age. CT was performed for indications other than sinusitis. Prospective concurrent clinical history was obtained and physical examination of the upper respiratory tract was performed. Of 100 infants, 16 had hypoplasia of the maxillary sinuses; 81 per cent (13/16) of these were less than two months of age. The antra showed progressive increase in size during the first year of life. Of the 100 infants, 70 had CT sinus opacification, including 67 per cent of those without historical or physical evidence of upper respiratory tract infection.

There was a positive correlaton of CT findings between the maxillary and ethmoid sinuses in 80 per cent of the infants older than two months of age but in only 49 per cent of the younger infants. Radiographic sinus opacification in infants is of uncertain significance and is not diagnostic of upper respiratory tract infection, much less of sinusitis. Author.

Evaluation of histopathologic parameters in predicting cervical lymph node metastasis of oral and oropharyngeal carcinomas. Shingaki, S., Suzuki, I., Nakajima, T., Kawasaki, T. First Department of Oral and Maxillofacial Surgery, School of Dentistry, Niigata University, Japan. Oral Surgery, Oral Medicine, Oral Pathology 1988 Dec, Vol. 66 (6), pp. 683–8.

A retrospective study of 53 patients with squamous cell carcinomas of the oral cavity and oropharynx was undertaken to evaluate histopathologic parameters in predicting cervical lymph node metastasis. Biopsy and surgical specimens were examined for degree of differentiation, pattern and depth of stromal invasion, lymphaticvascular invasion, and lymphoplasmacytic response in relation to metastasis. The incidence of lymph node metastasis in tumors showing grade III type diffuse invasion (71.4 per cent) and with stromal invasion of more than 8 mm in depth (83.3 per cent) as significantly ligher than that of tumors with well-demarcated boundaries (44.4 per cent to 5.2 per cent) and superficial invasion (35.3 per cent to 8.3 per cent). Lymph node metastasis also increased in the presence of lymphatic-vascular invasion by tumor cells, whereas the degree of differentiation and lymphoplasmacytic response was not related to metastasis. Thus, the pattern and the depth of stromal invasion and the presence of lymphatic-vascular invasion were important indicators in prediction of cervical lymph node metastasis. Prophylactic neck dissection is advocated when grade III type diffuse invasion, invasion exceeding 8 mm in depth, or grade II type invasion accompanied by a 4 mm to 8 mm depth of invasion is observed in a biopsy specimen. Author.

The effect of acoustic neuroma removal on hearing in the contralateral ear. Barratt, H. J., Prasher, D. K. Institute of Neurology, National Hospital, Queen Square, London, UK. *Scandinavian Audiology* 1988, Vol. 17 (3), pp. 137–42.

Twenty-two patients with unilateral acoustic neuromas were assessed audiometrically pre- and post-operatively. A high proportion (36 per cent) were found to have a hearing loss of 10 dB or more (six frequency average) in the contralateral ear in the post-operative period. The evidence points to a cochlear site of the loss, and serial audiograms suggest that the hearing deteriorates in the immediate post-operative period. Follow-up audiometry at three months or more showed that the hearing recovered to pre-operative levels. The possible mechanism of the hearing loss is discussed. Author.

Effects of sex on auditory brainstem responses in infancy and early childhood. Institute of Otorhinolaryngology, Catholic University of the Holy Heart, Rome, Italy. *Scandinavian Audiology* 1988, Vol. 17 (3), pp. 143–6.

The effects of sex on I-III, III-V and I-V interwave intervals and I, III, V ABR waves latency values have been studied in 171 normal children born at term, 94 males and 77 females, aged between two and 720 days. The obtained data confirm that latency values decrease progressively with age, and show that there is a statistically significant difference in wave III and V latency values and in III-V and I-V intervals between males and females. Moreover, these differences seem to increase with age. The authors also discuss the possible underlying mechanisms and claim that even in infancy, sex-related variability should be taken into account. Author.

The value of combining a auditory brainstem responses and acoustic reflex threshold measurements in neuro-otological diagnosis. Cohen, M., Prasher, D. National Hospital, London, England. *Scandinavian Audiology*, 1988, Vol. 17 (3), pp. 153–62.

Acoustic reflex thresholds (ARTR) and auditory brainstem responses (ABR) were measured in 69 patients referred to the Neuro-otological clinic on the suspicion of a retrocochlear lesion. The pure-tone selection criterion was an average hearing loss of less than 60 dB at 0.5, 1, 2, and 4 kHz, with no thresholds exceeding 70 dB and only one threshold exceeding 60 dB. Both tests proved independently to be most effective in the diagnosis of cerebellopontine angle (CPA) tumours and to a lesser extent for brainstem lesions. The ABR was positive in 100 per cent of CPA group and 90 per cent in the brainstem group compared with 93 per cent and 70 per cent respectively for the ART. The combination of the two tests provides patterns of abnormality which are more disease specific. In the CPA cases the most common and consistent patterns of abnormality were the unilateral delay of Wave V or III and V of the ABR asociated with a vertical ART pattern indicative of an abnormality of the ipsi and contralateral reflexes on stimulating the affected side. Intrinsic brainstem lesions most commonly resulted in bilateral ABR abnormalities combined with the full-house ART pattern indicative of bilateral abnormalities of both ipsi and contralateral reflexes. Author.

The effects on auditory function of damage to the pontine olivocochlear bundle in man. Cohen, M., Rudge, P., Robinson, K., Miller, D. National Hospital, Queen Square, London, UK. Scandinavian Audiology, 1988, Vol. 17 (3), pp. 185-9.

A patient with multiple sclerosis (MS) in whom a lesion developed in the pons between successive nuclear magnetic resonance image scans (MRI) is described. The patient developed intolerance of loud sounds, with distorted perception of speech and music, and abnormalities of stapedius reflex threshold, masked speech audiometry, and masking level difference assessment in the presence of an unchanged pure tone threshold. These abnormalities partially resolved over a number of months. It is postulated that the efferent olivo-cochlear bundle was involved on one side of the pons and the abnormalities are interpreted in terms of bilateral removal of inhibition from the hair cells of the cochlea. Author.

Occupational hearing impairment in pig breeders. Kristensen, S., Gimsing, S. Department of Oto-rhino-laryngology, St. Joseph's Hospital, Esbjerg, Denmark. *Scandinavian Audiology*, 1988, Vol. 17 (3), pp. 191–2.

Individuals employed at pig breeding facilities are exposed to potentially harmful noise from several sources. In a building housing about 1,100 pigs, the animals themselves were found to produce a sustained noise level between 95 and 104 dBA during the feeding procedure. High-pressure cleaners used for cleaning the buildings generate between 98 and 105 dBA. We present a case of typical noise-induced hearing loss, which, with reasonable certainty, can be ascribed entirely to this kind of noise exposure. General use of hearing protectors in the profession is recommended. Author.