

Abstract Selection

Familial spasmodic dysphonia with low arylsulphatase A (ASA) level. Martinelli, P., Montanari, M., Ippoliti, M., Mochi, M., Sangiorgi, S., Capocasa, M. Institute of Neurology, University of Bologna, Italy. *Acta Neurologica Scandinavica* (1995) March, Vol. 91 (3), pp. 196–9.

Two familial cases of late onset spasmodic dysphonia and low Arylsulphatase A (ASA) are reported. In one case spasmodic dysphonia was associated with negative head tremor and orthostatic tremor, both displayed postural tremor of the upper extremities. A familial predisposition for both focal dystonia and metabolic lysosomal impairment is suggested by similar observations. Author.

Technical note: maxillofacial biomodelling-preliminary result.

Yau, Y. Y., Arvier, J. F., Barker, T. M. Department of Medical Imaging, Holy Spirit Hospital, Brisbane, Queensland, Australia. *British Journal of Radiology* (1995) May, Vol. 68 (809), pp. 519–23. A new technique of manufacturing three-dimensional (3D) hard tissue biomodels is described. The models, derived from computed tomography data, were constructed by a computer-controlled manufacturing device known as stereolithography apparatus (SLA). Selected cases of patients with facial deformities were presented to illustrate clinical applications of the SLA biomodelling. Physical demonstration of the bony internal anatomy in these patients promoted better conceptualization of the disease process, allowing optimal input into the management decision, pre-operative planning and choice of surgical technique with a consequent reduction in operating time and potential reduction in peri-operative morbidity. Limitations of the solid modelling technique include cost, a lengthy production time which renders it unsuitable for emergency cases, and radiation exposure of the patient. With wider use and further technological development, these drawbacks will be minimized. The 3D SLA biomodels may in future become an adjunct, not only to maxillofacial surgery, but also to other medical specialties. Author.

The application of ultrasound criteria for malignancy in differentiating tuberculous cervical adenitis from metastatic nasopharyngeal carcinoma. Ahuja, A., Ying, M., Evans, R., King, W., Metreweli, C. Department of Diagnostic Radiology, Prince of Wales Hospital, Shatin NT, Hong Kong. *Clinical Radiology* (1995) June, Vol. 50 (6), pp. 391–5.

Tuberculous adenitis and metastatic nodes from Nasopharyngeal carcinoma may have a similar clinical presentation. Clinical examination and laboratory tests alone are unable to differentiate the two. However, ultrasound is a useful initial investigation in differentiating these two conditions. We present ultrasound appearances in 33 patients with proven tuberculous cervical adenitis and 32 patients with proven metastatic nasopharyngeal carcinoma. The ultrasound features we found useful were the distribution of the nodes, cystic change, matting and surrounding soft tissue oedema. The size, shape and internal architecture of the nodes, previously described criteria in differentiating benign from malignant nodes, did not help. Author.

The abbreviated profile of hearing aid benefit. Cox, R. M., Alexander, G. C. University of Memphis, Tennessee, USA. *Ear and Hearing* (1995) April, Vol. 16 (2), pp. 176–86.

OBJECTIVE: To develop and evaluate a shortened version of the Profile of Hearing Aid Benefit, to be called the Abbreviated Profile of Hearing Aid Benefit or APHAB. **DESIGN:** The Profile of Hearing Aid Benefit (PHAB) is a 66-item self-assessment, disability-based inventory that can be used to document the outcome of a hearing aid fitting, to compare several fittings, or to evaluate the same fitting over time. Data from 128 completed PHABs were used to select items for the Abbreviated PHAB. All subjects were elderly hearing-impaired who wore conventional analog hearing aids. Statistics of score distributions and psychometric properties of each of the APHAB subscales were

determined. Data from 27 similar subjects were used to examine the test-retest properties of the instrument. Finally, equal-percentile profiles were generated for unaided, aided and benefit scores obtained from successful wearers of linear hearing aids. **RESULTS:** The APHAB uses a subset of 24 of the 66 items from the PHAB, scored in four 6-item subscales. Three of the subscales, Ease of Communication, Reverberation, and Background Noise address speech understanding in various everyday environments. The fourth subscale, Aversiveness of Sounds, quantifies negative reactions to environmental sounds. The APHAB typically requires 10 minutes or less to complete, and it produces scores for unaided and aided performance as well as hearing aid benefit. Test-retest correlation coefficients were found to be moderate to high and similar to those reported in the literature for other scales of similar content and length. Critical differences for each subscale taken individually were judged to be fairly large, however, smaller differences between two tests from the same individual can be significant if the three speech communication subscales are considered jointly. **CONCLUSIONS:** The APHAB is a potentially valuable clinical instrument. It can be useful for quantifying the disability associated with a hearing loss and the reduction of disability that is achieved with a hearing aid. Author.

Role of anaerobic bacteria in chronic otitis media and cholesteatoma. Brook, I. Department of Pediatrics, Georgetown University School of Medicine, Washington, DC, USA. *International Journal of Pediatric Otorhinolaryngology* (1995) March, Vol. 31 (2–3), pp. 153–7.

Otitis media (OM), a common infection in children, can cause significant morbidity. Selection of the most appropriate treatment regimen directed against the pathogens responsible for the OM can minimize complications. The most frequently isolated bacteria from chronic OM are *Staphylococcus aureus*, *Pseudomonas aeruginosa* and anaerobic bacteria. The predominant anaerobes are *Peptostreptococcus* spp., pigmented *Prevotella* and *Porphyromonas* spp., *Bacteroides* spp. and *Fusobacterium* spp. Many of the organisms causing OM can produce beta-lactamase, which can contribute to the failure of penicillins therapy. The appropriate surgical and medical therapy for chronic OM is reviewed. Author.

Recurrent respiratory papillomatosis in the larynx: re-emergence of clinical disease following surgery. Harries, M. L., Juman, S., Bailey, C. M. Department of Paediatric Otorhinolaryngology, Hospital for Children, London, UK. *International Journal of Pediatric Otorhinolaryngology* (1995) March, Vol. 31 (2–3), pp. 259–62.

The treatment and aetiology of recurrent respiratory papillomatosis remains unclear. We report a case of laryngeal papillomatosis where repeated suction diathermy and later laser treatment led to the formation of a substantial glottic web, but a clinically papilloma-free state of the upper aerodigestive system. Division of the web led to widespread recurrence of the papillomas, which eventually resolved after the larynx had healed with the reformation of a limited anterior web. The role of surgical trauma and its effect on re-emergence of papillomas is discussed. Author.

A prospective randomised trial of the use of sodium bicarbonate and hydrogen peroxide ear drops to clear a blocked tympanostomy tube. Spraggs, P. D., Robinson, P. J., Ryan, R., East, C. A., Graham, J. M. Royal Ear Hospital, London, UK. *International Journal of Pediatric Otorhinolaryngology* (1995) March, Vol. 31 (2–3), pp. 207–14.

This randomized prospective trial compared the efficacy of sodium bicarbonate and hydrogen peroxide ear drops in clearing a blocked tympanostomy tube. Tympanostomy tubes, 110 in number, obstructed with blood or inspissated secretions were randomized into treatment and control groups. Details of the operative procedure were retrospectively collected from the

patients' notes. The patients were reviewed after two weeks for both clinical and tympanometric evidence of clearance of the tube and evidence of complications of the drops. There was no significant therapeutic advantage between the two drops ($P>0.9$), but in both treatment arms there was a significant therapeutic advantage over a period of observation ($P<0.05$ in both groups). Otorrhoea and pain on instilling the drops occurred with equal incidence in both treatment groups. As obstruction of tympanostomy tubes is a common occurrence which often prompts surgical reventilation, there is great potential for cost savings if conservative treatment can be used effectively. The treatments for obstructed tympanostomy tubes are reviewed and methods of prevention of this common occurrence are discussed. Author.

Screening for neonatal and infant deafness in Europe in 1992.

Francois, M., Bonfils, P., Narcy, P. Department of Otorhinolaryngology, Hopital Robert Debre, Faculty Bichat, University Paris VII, France. *International Journal of Pediatric Otorhinolaryngology* (1995) March, Vol. 31 (2-3), pp: 175-82.

Many methods of screening for hearing impairment are available. The aim of our study was to determine which ones were really used in 1992. At the request of the British Audiology Society, we conducted an inquiry into the organization of screening for deafness in neonates and infants in Europe. In practice all 6-9 month-old infants are tested with behavioural tests in every country. For the neonates, generally only those at risk for hearing-impairment (about 5 per cent) were tested. The most widely used tests were behavioural ones. Only specialized centers used transient evoked otoacoustic emissions (TEOAEs). This last test assesses the active mechanical properties of the cochlea and allows detection of even mild or unilateral sensorineural deafness. Author.

Peritonsillar abscess in children. Is incision and drainage an effective management?

Apostolopoulos, N. J., Nikolopoulos, T. P., Bairamis, T. N. ENT Department, P. and A. Kyriakou Children's Hospital, Thibon and Lebadias, Athens, Greece. *International Journal of Pediatric Otorhinolaryngology* (1995) March, Vol. 31 (2-3), pp: 129-35.

Debate continues concerning proper management of peritonsillar abscess (PA). We studied 189 children (mean age, nine years) admitted in our department during the last seven years with the diagnosis of PA. Management consisted of incision and drainage (performed in 92.5 per cent of the children without general anaesthesia) and antibiotic therapy intravenously. There was resolution without complications in the overwhelming majority of the cases. After the initial episode, we further followed up 101 children. The recurrence rate was 15.8 per cent. Forty-seven per cent of the recurrences occurred one month after the children had been discharged. Probably some of these second PA should be considered as persistent and not as recurrent. Therefore, we propose that after their discharge, the children must take oral antibiotics (resistant to beta-lactamase) for more than 10 days. Cultures were taken from 58 cases. The predominant bacterial isolates were *Streptococcus* spp. (55 per cent), anaerobes spp. (12 per cent) and *Staphylococcus aureus* (6 per cent). To our knowledge, this is the first survey that addresses exclusively a pediatric population and suggests that incision and drainage without general anaesthesia is an applicable and effective management in children with PA. Moreover, we believe that

peritonsillar abscess is no longer a strong indication for tonsillectomy due to the relatively low rate of recurrence. We recommend close follow-up mainly for the first months after the initial episode. Author.

Otoplasty and its origins for the correction of prominent ears.

Brenda, E., Marques, A., Pereira, M. D., Zantut, P. E. Surgical Clinic Division, Medical School, University of Sao Paulo, Brazil. *Journal of Craniomaxillofacial Surgery* (1995) April, Vol. 23 (2), pp: 99-104.

The authors present a review of the literature concerning surgical correction of lop ear, re-examining the original procedures. Their own approach which combines the most suitable of several techniques described in the literature is presented. Using this approach they achieve good results stimulating them to continue utilizing this personal procedure. Author.

Anterior cranial base reconstruction using a hydroxyapatite-tricalciumphosphate composite (Cerattite) as a bone substitute.

Nakajima, T., Yoshimura, Y., Nakanishi, Y., Kanno, T., Sano, H., Kamei, Y. Department of Plastic and Reconstructive Surgery, School of Medicine, Fujita Health University, Japan. *Journal of Craniomaxillofacial Surgery* (1995) April, Vol. 23 (2), pp: 64-7.

The craniofacial approach to cranial base tumours has widened the operability of tumours with intracranial invasion. However, the resulting skull base defect must be reconstructed adequately to prevent postoperative morbidity and mortality. We use hydroxyapatite-tricalciumphosphate ceramic (Cerattite) as a bone substitute material to reconstruct the skull base defect in combination with the pericranial flap, ensuring separation between the sinonasal cavity and epidural cavity. Although the nasal surface of the Cerattite block is left exposed directly to the sinonasal cavity, it was shown to be epithelialized within six months postoperatively. Our method is less invasive than any other conventional method and may offer more chance of curative resection of tumours with anterior skull base invasion. Author.

Monitoring nasal allergic inflammation by measuring the concentration of eosinophil cationic protein and eosinophils in nasal secretions.

Wang, D., Clement, P., Smits, J., de Waele, M., Derde, M. P. Department of Otorhinolaryngology, University Hospital, Free University, Brussels, Belgium. *Allergy* (1995) February, Vol. 50 (2), pp: 147-51.

Quantitative measurement of the eosinophil cationic protein (ECP) concentration and the percentage of eosinophils in nasal secretions has greatly improved our understanding of the inflammatory process after natural allergen exposure. ECP and eosinophils were measured in the nasal secretions of 40 symptomatic patients with seasonal allergic rhinitis during the pollen season. Results showed a significant relationship between a high concentration of ECP (median: 410 ng/g, range: 6-2380 ng/g) and a high percentage of eosinophils (median: 13.5 per cent, range: 1-85 per cent). This quantitative study again demonstrated that infiltration by eosinophils and release of ECP play a key role in allergic rhinitis. It also suggests that the combined measurement of the percentage of eosinophils together with the ECP concentration in nasal secretions seems to be a very useful model in monitoring and assessing the condition of chronic nasal inflammation in patients with allergic rhinitis. Author.