The Journal of Laryngology and Otology
April 1989. Vol. **103.** pp. 439–442

Abstract Selection

Pneumosinus dilatans. Pospisil, O. A., Balmer, M. C. Maxillogacial Unit, Walton Hospital, Liverpool. *British Journal of Oral and Maxillofacial Surgery* 1988 Oct, Vol.26 (5), pp. 375–80.
Deformity of the forehead is usually the first clinical presentation of the abnormally enlarged paranasal sinuses caused by pneumosinus dilatans. The diagnosis and surgical treatment of two cases are reported. The type of osteotomy described is recommended as a method of surgical treatment of this condition. Author.

Moderately differentiated neuroendocrine carcinoma of the larynx. A clinicopathologic study of 54 cases. Wenig, B. M., Hyams, V. J., Heffner, D. K. Department of Otolaryngic Pathology, Armed Forces Institute of Pathology, Washington, DC 20306–6000. *Cancer* 1988 Dec 15, Vol. 62 (12), pp. 2658–76.
Fifty-four cases of primary laryngeal moderately differentiated neuroendocrine carcinoma from the Armed Forces Institute of Pathology Otolaryngic Tumor Registry (AFIP–OTR) are reported. The tumours most often present in men in their sixth and seventh decades of life and are heralded by an array of symptoms, the most frequent being hoarseness. The primary site was most often the supraglottic larynx. The investigation has included light-microscopic, histochemical, immunocytochemical, and electron microscopic analyses which support expression of both neuroendocrine and epithelial differentiation. Conservative surgery alone can be utilized if early identification of the tumour and complete surgical removal are assured. The follow-up of the patients reveals 62 per cent as remaining tumour-free after surgical extirpation over periods ranging from one month to 16 years (median: three years, nine months). Factors adversely affecting prognosis include metastatic disease at initial presentation, incomplete surgical removal, and vascular or lymphatic invasion. There was no correlation between tumour size, morphologic pattern, mitoses or necrosis, and survival. Sixty-eight per cent of the patients gave a history of long-term cigarette smoking. The classification and pathogenesis of these neoplasms remains the focus of much speculation. they are suggested as arising from the cells of the dispersed neuroendocrine system (DNES). However, a more uniform and descriptive nomenclature is necessary. This study resolves this and other issues along with a presentation of clinicopathologic data of the tumour entity. Author.

Role of fine needle aspiration in the diagnosis of lesions of the oral cavity, oropharynx, and nasopharynx. Scher, R. L., Oostingh, P. E., Levine, P. A., Cantrell, R. W., Feldman, P. S. Department of Otolaryngology–Head and Neck Surgery, University of Virginia Medical Center, Charlottesville, Virginia 22908. *Cancer* 1988 Dec 15, Vol. 62 (12), pp. 2602–6.
The oral cavity, oropharynx and nasopharynx are readily accessible to fine needle aspiration (FNA). This study reviews the author's experience with 93 FNA from these sites: 76 from the oral cavity, eight from the oropharynx, and eight from the nasopharynx. Thirty-nine (42 per cent) of the FNA were positive for malignancy with no false-positive diagnoses. In 15 cases the FNA provided the initial diagnoses of cancer and in 24 cases documented recurrence. Five (five per cent) of the FNA interpreted as suspicious for malignancy were subsequently proven malignant by biopsy. There were 33 (36 per cent) negative FNA with seven false-negative diagnoses confirmed by biopsies. Fifteen FNA (16 per cent) were unsatisfactory and malignancy was found by biopsy in two of these cases. These results emphasize the importance of repeating the FNA or recommending biopsies in negative and unsatisfactory FNA when clinically indicated to assure accuracy in diagnosis. A positive FNA may be regarded as a definitive diagnostic test and treatment instituted accordingly. No complications resulted from these FNA. This study demonstrates the application, safety, and accuracy of FNA in these anatomic sites. Author.

Treatment of the obstructive sleep apnea syndrome using a nasopharyngeal tube. Nahmias, J. S., Karetzky, M. S. Newark Beth Israel Medical Center, University of Medicine and Dentistry of New Jersey, Newark. *Chest* 1988 Dec, Vol. 94 (6), pp. 1142–7.
The efficacy of a nasopharyngeal tube was evaluated in 44 patients with obstructive sleep apnea syndrome. Twenty-four of these patients underwent repeated polysomnographic studies with the nasopharyngeal tube in place. They had a 62.3 per cent decrease in apnea index and a 39.2 per cent decrease in disordered breathing events/h. The nasopharyngeal tube was successful in 16 of the 24 patients (66.7 per cent efficacy), and overall patient tolerance of the tube was 44.2 per cent. The nasopharyngeal tube failures had a higher apnea + hypopnea index, lower Sa02 nadir, and a higher PaC02 than the nasopharyngeal tube successes. They were also heavier than the successful patients. The nasopharyngeal tube is a useful alternative treatment for patients with OSA syndrome and may be used as an immediate therapeutic modality while the patient loses weight or as an alternative for those patients who fail or cannot tolerate nasal continuous positive airway pressure. Author.

Radiological study of the paranasal sinuses in lepromatous leprosy. *Indian Journal of Leprosy* 1988 Apr, vol. 60 (2), pp. 285–9.
Thirty patients of lepromatous leprosy have been studied by radiological investigation for affection of paranasal sinuses. It has been found that leprosy involves all groups of sinuses and maxillary antrum is found to be more commonly affected. Diffuse hypertrophy type of lesion is more commonly affected. Diffuse hypertrophy type of lesion is more commonly recorded in maxillary antrum, in x-ray of paranasal sinuses. The clinical significance and importance of extension of disease in the sinuses is discussed in the light of available literature. Author.

Treatment of chronic maxillary sinusitis in children. Otten, F. W., Grote, J. J. Department of Otorhinolaryngology and Head and Neck Surgery, Academic Hospital, University of Leiden, The Netherlands. *International Journal of Pediatric Otorhinolaryngology* 1988 Sep, Vol. 15 (3), pp. 269–78.
In the present study 141 children aged between three and ten years and suffering from chronic maxillary sinusitis were treated non-selectively in one of four ways: amoxicillin combined with decongestive nose drops, drainage of the maxillary sinus, a combination of the two, or a placebo. The duration of the follow-up period was six months. The therapeutic effects of the four forms of treatment did not differ significantly. Haemophilus influenzae and Streptococcus pneumoniae were the micro-organisms encountered most often in these children. The results are discussed. Author.

Effects of maternal cocaine abuse on the neonatal auditory system. Shih, L., Cone-Wesson, B, Reddix, B. Department of Otolaryngology–Head and Neck Surgery, University of Southern California School of Medicine, Los Angeles 90033. *International Journal of Pediatric Otorhinolaryngology* 1988 Sep, Vol. 15 (3), pp. 245–51.
Eighteen neonates born to cocaine-abusing mothers were tested for peripheral and brainstem auditory dysfunction using auditory brainstem responses (ABR). Their data were compared to ABRs from 18 normal neonates. The ABR data were analyzed to determine if ABR parameters were abnormal in neonates born to cocaine-abusing mothers in comparison to normal neonates. ABRs from neonates exposed to maternal cocaine abuse show prolonged interpeak latencies and prolonged absolute latencies. These abnormalities indicate neurologic impairment or dysfunction that warrants further audiologic and neurologic follow-up. Author.

An unusual laryngeal lesion in children: granular cell tumor. Goldofsky, E., Hirschfield, L. S., Abramson, A. L. Department of Otolaryngology, Long Island Jewish Medical Center, New Hyde Park, NY 11042. *International Journal of Pediatric Oto-Rhinolaryngology* 1988 Sep, Vol. 15 (3), pp. 263–7.
Granular cell tumour, a relative rare neoplasm, is of particular interest of the otolaryngologist as some 50 per cent of cases appear in the head and neck region. The youngest reported case of a laryngeal granular cell tumour is presented. Involvement of the larynx is uncommon, but when it occurs it may create diagnostic and therapeutic dilemmas. Author.

Evaluation of two voice-separation algorithms using normal-hearing and hearing-impaired listeners. Stubbs, R. J., Summerfield, Q. MRC Institute of Hearing Research, University Park, Nottingham, United Kingdom. *Journal of the Acoustical Society of America* 1988 Oct, Vol, 84 (4), pp. 1236–49.
Two signal-processing algorithms, designed to separate the voiced speech of two talkers speaking simultaneously at similar intensities in a single channel, were compared and evaluated. Both algorithms exploit the harmonic structure of voiced speech and require a difference in fundamental frequency (FO) between the voices to operate successfully. One attenuates the interfering voice by filtering the cepstrum of the combined signal. The other uses the method of harmonic selection (T. W. Parsons, *Journal of Acoustical Society of America* 60, 911–918 (1976)) to resynthesize the target voice from fragmentary spectral information. Two perceptual evaluations were carried out. One involved the separation of pairs of vowels synthesized on static FO's; the other involved the recovery of consonant-vowel (CV) words masked by a synthesized vowel. Normal-hearing listeners and four listeners with moderate-to-severe, bilateral, symmetrical, sensorineural hearing impairments were tested. All listeners showed increased accuracy of identification when the target voice was enhanced by processing. The vowel-identification data show that intelligibility enhancement is possible over a range of FO separations between the target and interfering voice. The recovery of CV words demonstrates that the processing is valid not only for spectrally static vowels but also for less intense time-varying voiced consonants. The results for the impaired listeners suggest that the algorithms may be applicable as components of a noise-reduction system in future digital signal-processing hearing aids. The vowel-separation test, and subjective listening, suggest that harmonic selection, which is the more computationally expensive method, produces the more effective voice separation. Author.

Modification of spontaneous and evoked otoacoustic emmissions and associated psychoacoustic microstructure by aspirin consumption. Long, G. R., Tubis, A. Department of Audiology and Speech Sciences, Purdue University, West Lafayette, Indiana 47907. *Journal of the Acoustical Society of America* 1988 Oct, Vol. 84 (4), pp. 1343–53.
The discovery that aspirin consumption can abolish spontaneous otoacoustic emsissions (D. Mc Fadden and H. S. Plattsmier, *Journal of the Acoustical Society of America* 76, 443–448 (1984)) provides a technique for further exploring the relation between otoacoustic emissions (spontaneous and evoked) and psychacoustic threshold microstructure. Spontaneous emissions, delayed evoked emissions, synchronous evoked emissions, and threshold microstructure in four subjects were monitored before, during, and after consumption of 3.9 g of aspirin per day (three 325–mg tablets every 6 h) for three or four days. The changes in spontaneous emissions are consistent with the finding of McFadden and Plattsmier except that one spontaneous emission appeared to plateau at a reduced level above the noise floor during the last day and a half of the three day period of aspirin consumption. Evoked emissions and threshold microstructure were also reduced by aspirin consumption but persisted longer and recovered sooner. In most instances, the initial sensitivity (reduced thresholds), with a greater increase near thereshold maxima than at threshold minima. Further reduction in the levels of the evoked emissions was accompanied by the eventual decrease in sensitivity (elevation of all thresholds). Author.

Sinusitis in adults and its relation to allergic rhinitis, asthma, and nasal polyps. Slavin, R. G. Division of Allergy and Immunology, St. Louis University of School of Medicine, Mo. *Journal of Allergy and Clinical Immunology* 1988 Nov, Vol. 82 (5 pt 2), pp. 950–6.
Sinusitis, an infection of the paranasal sinuses, has been linked to allergic rhinitis, asthma, and nasal polyps. Sinusitis is a common complication of allergic rhinitis, which can lead to inflammation of the sinus mucosa, obstruction of the sinus opening or ostium, and generally favourable conditions for bacterial growth. Sinusitis can trigger asthma. Stimulated nerves in an infected sinus may result in parasympathetic stimulation to the bronchial tree and in smooth muscle contraction. Sinusitis may be a cause of nasal polyps, which are common when sinusitis complicates allergic rhinitis and even more common in nonallergic rhinitis. Treatment of sinusitis strives to eliminate infection and promote drainage. Ampicillin or amoxicillin is the antibiotic of choice. All patients with sinusitis should be treated with antibiotic to encourage drainage. Fluids, expectorants, and decongestants, both oral and topical, should be used. As many as half of patients with sinusitis also have marked rhinitis (either allergic or nonallergic), nasal polyps, or swollen, edematous mucosa; these patients should also receive topical steroids, such as flunisolide. Flunisolide promotes drainage and aeration by decreasing inflammation, swelling, and the influx of white blood cells. Persistent sinusitis may need to be treated surgically. Author.

Eosinophilic nonallergic rhinitis. Mullarkey, M. F. Virginia Mason Clinic, Seattle, Wash. *Journal of Allergy and Clinical Immunology* 1988 Nov, Vol: 82 (5 Pt 2), pp. 941–9.
Eosinophilic nonallergic rhinitis is one of the major forms of nonallergic rhinitis. It is characterized by the presence of many eosinophils in nasal secretions, a negative history for allergen exacerbation, and negative skin tests. It is often associated with nasal polyps and shares their exquisite sensitivity to corticosteroid therapy, both systemic with prednisone or topical with flunisolide. Patients with rhinitis can be separated into diagnostic categories and assigned scores on the basis of history of allergic reactions, status of nasal mucosa, response to skin tests, and IgE titer. Based on these criteria, in a study of 142 patients with rhinitis, those with allergic or probable allergic rhinitis could clearly be separated from those with nonallergic rhinitis. Thirty-four per cent had allergic rhinitis (mean score 5.4), 15 per cent had probable allergic rhinitis (mean score 3.8), 37 per cent had vasomotor rhinitis (non-eosinophilic, nonallergic rhinitis; mean score 0.75), and 15 per cent had eosinophilic nonallergic rhinitis (mean score 0.71), Eighty-three per cent of patients with eosinophilic nonallergic rhinitis responded to antihistamines and 93 per cent responded to the topical corticosteroid flunisolide, making the total response 90 per cent. The response of the latter patients to these medications was statistically better than the response of those patients with allergic rhinitis. Author.

Antiallergic activity of H1-receptor antagonists assessed by nasal challenge. Bousquet, J., Lebel, B., Chanal, I., Morel, A., Michel, F. B. Clinique des Maladies Respiratoires, Montpellier, France. *Journal of Allergy and Clinical Immunology* 1988, Nov, Vol. 82 (5 Pt 1), pp. 881–7.
Most oral drugs used for the treatment of allergic rhinitis are classified as H1-receptor antagonists, and although they represent major sales throughout the world, their mechanism of action is still poorly known. In an attempt to understand better the in vivo therapeutic effects of these drugs, a double-blind, crossover study was carried out. The study compared the effects of terfenadine and loratadine, nonsedative H1-receptor antagonists, on the immediate allergic response of the upper airways to challenge with orchard-grass pollens in 14 highly allergic subjects. Increasing numbers of pollen grains were insufflated into the nostrils, and the response of the subjects was assessed by examining symptoms and measuring the release of histamine and prostaglandin D2 in nasal secretions. Each drug was administered for a week before challenge. This study demonstrated the clinical efficacy of both drugs by comparison to that of a control day, since symptoms were observed for a significantly ($p = 0.014$) greater number of pollen grains. Only one patient had a significant release of histamine when they were treated with loratadine versus ten during control day ($p<0.0023$) and six when they were treated with terfenadine ($p<0.01$). Prostaglandin D2 release occurred with a higher allergen dose when patients were treated with both drugs. This

study indicates that some H1 antagonists also possess antiallergic activities. Author.

Correlation between symptoms and the threshold for release of mediators in nasal secretions during nasal challenge with grass-pollen grains. Lebel, B., Bosquet, J., Morel, A., Chanal, I., Godard, P., Michel, F. B. INSERM U58, Montpellier, France. *Journal of Allergy and Clinical Immunology* 1988 Nov, Vol. 82 (5 Pt 1), pp. 869–77.
Nasal challenges with pollen grains represent one of the techniques of provocation. However, the clinical criteria of positivity are not clearly established. Nasal challenges with increasing numbers of orchard-grass pollen grains were performed in 60 patients allergic to grass pollens and 20 normal subjects. Before any challenge, the nose was washed three times with saline and then lactose, and 50, 150, 450, 1350, and 4050 orchard-grass pollen grains were insufflated into the nostrils until a symptom score of five was reached. This score was mainly based on major symptoms of allergic rhinitis, for example, rhinorrhea, nasal obstruction, sneezes, and to a lesser extent, on minor symptoms, such as pruritus, conjunctivitis, and pharyngitis. Nasal secretions were obtained after each challenge by lavage. Histamine was titrated by a radioimmunoassay with a monoclonal antibody against acylated histamine. Prostaglandin D2 (PGD2) was assayed with an enzyme immunoassay with a polyclonal antibody against PGD2 methoxamine. None of the normal subjects had a symptom score greater than 2; 55/60 patients had a positive challenge. The release of PGD2 was significantly ($p<0.001$, Kruskal-Wallis test) correlated with a symptom score of five; 74.5 per cent of patients had a significant release of PGD2 in nasal secretions. In contrast, although 58.2 per cent of patients had a release of histamine in nasal secretions when the challenge was positive, the correlation with symptom scores was not significant. PGD2 in nasal secretions increased 3.7 fold after a positive nasal challenge. Author.

Natural immunity to dust mites in patients with chronic rhinosinusitis. Freudenberger, T., Grizzanti, J. N., Rosenstreich, D. L. Albert Einstein College of Medicine, Bronx, NY 10461. *Journal of Allergy and Clinical Immunology* 1988, Nov, Vol. 82 (5 Pt 1), pp. 855–62.
Chronic rhinosinusitus is an extremely common clinical problem of which the etiology is poorly understood. To understand the role of common environmental antigens in this disease, natural immunity to antigens derived from the house dust mite was evaluated in 22 adults with chronic rhinosinusitis and compared to a carefully matched group of patients with chronic asthma or to a group of normal individuals. Allergic reactivity to dust mites was very common in patients with chronic rhinosinusitis, with 68 per cent exhibiting a positive immediate skin test reaction and 41 per cent exhibiting elevated levels of mite-specific serum IgE; 72 per cent of patients with rhinosinusitis also exhibited markedly elevated levels of mite-specific serum IgG, which were present in both mite-allergic and nonallergic patients. IgG titers were much higher in the group with rhinosinusitis than in patients with asthma, whereas allergic reactivity to dust mites was significantly higher in the patients with asthma. Mite-specific immunity was low or absent in the group of normal individuals. These findings demonstrate that natural immunity to dust mites is very common in patients with chronic rhinosinusitis and suggest that immunity to mites may be involved in this syndrome. Furthermore, the data indicate that there may be significant differences in the ability of patients with rhinosinusitis or asthma to produce mite-specific antibodies of the IgG class. Author.

Multicenter, double-blind, multiple-dose, parallel-groups efficacy and safety trial of azelastine, chlorpheniramine, and placebo in the treatment of spring allergic rhinitis. Weiler, J. M., Donnelly, A., Campbell, B. H., Connell, J. T., Diamond, L., Hamilton, L. H., Rosenthal, R. R., Hemsworth, G. R., Perhach, J. L. Jr. University of Iowa, Iowa City. *Journal of Allergy and Clinical Immunology* 1988 Nov, Vol. 82 (5 Pt 1), pp. 801–11.
Azelastine, a novel antiallergic medication, was compared with chlorpheniramine maleate and placebo for efficacy and safety in the treatment of spring allergic rhinitis in a multicentre, double-blind, multiple-dose, parallel-groups study. One hundred fifty-five subjects participated. Subjects ranged in age from 18 to 60 years of age and had at least a two-year history of spring allergic rhinitis, confirmed by positive skin test to spring aeroallergens. Medications were given four times daily; the azelastine groups received 0.5, 1.0, or 2.0 mg in the morning and evening with placebo in the early and late afternoon; the chlorpheniramine group received 4.0 mg four times daily. Daily subject symptom card were completed during a screening period to assess pretreatment symptoms and during a four week treatment period while subjects received study medications. Individual symptoms, total symptoms, and major symptoms were compared to determine efficacy of medication. Elicitated, volunteered, and observed adverse experiences were recorded for each subject and compared among groups. Vital signs, body weights, serum chemistry values, complete blood cell counts, urine studies, and electrocardiograms were obtained for each subject and compared among groups. Symptoms relief in the group receiving the highest concentration of azelastine (2.0 mg twice daily) was statistically greater than in the placebo group during all weeks of the study. Lower doses of azelastine were statistically more effective than placebo only during portions of the first three weeks of the study. In contrast, although the chlorpheniramine group did have fewer symptoms than the placebo group during the study, the difference never reached statistical significance during any week of the study. There were no serious side effects in any of the treatment groups. Drowsiness and altered taste perception were increased significantly over plaebo only in the high-dose azelastine group. Azelastine appears to be a safe, efficacious medication for seasonal allergic rhinitis. Author.

The role of nasal airway obstruction in sinus disease and facial development. Shapiro, G. G. Northwest Asthma and Allergy Center, University of Washington School of Medicine, Seattle. *Journal of Allergy and Clinical Immunology* 1988 Nov, Vol. 82 (5 Pt 2), pp. 935–40.
Allergic rhinitis in children is often complicated by bacterial sinusitis, which can lead to chronic illness and dysfunction. Sinus disease manifests differently in children than in adults, with cough, rhinorrhea, and middle ear disease being common and pain, headache, and fever being uncommon. Sinusitis may exacerbate asthma, and as many as 70 per cent of children with allergy and chronic rhinitis have abnormal findings on sinus x-ray studies. Nasal cytologic specimens showing large numbers of polymorphonuclear cells with intracellular bacteria are also evidence of sinusitis. Obstruction of the nasal airways by allergic rhinitis or enlarged adenoids can lead to deviations in facial growth, specifically increased facial length. With the removal of the obstruction and a return to nasal breathing, facial length may become more normal. Sinusitis in children is treated with antibiotics, usually for three to four weeks, to eliminate the infection. Adjunctive therapy with antihistamines, decongestants, cromolyn, and corticosteroids may also be helpful. Topical steroids, such as flunisolide and beclomethasone, can be very useful in pediatric patients. These steroids decrease edema and prevent the release of allergic mediators that may be responsible for an environment favouring the bacterial infection causing sinusitis. Author.

Malignant external otitis in children. Rubin, J., Yu, V. L., Stool, S. E. Department of Otolaryngology, University of Pittsburgh, Pennsylvania. *Journal of Pediatrics* 1988 Dec, Vol, 113 (6), pp. 965–70.
Malignant external otitis in the pediatric population is primarily a disease of children with chronic illness or immunosuppression. The present of severe, unrelenting otalgia, otorrhea with isolation of Pseudomonas aeruginosa, a markedly elevated erythrocyte sedimentation rate, and evidence of bone destruction on computed tomography scan should alert the clinician to the diagnosis. Unlike adults, children have a higher incidence of seventh nerve paralysis earlier in the course of the infection. They also manifest more frequent involvement of the middle ear with tympanic membrane destruction. The short interval between the onset of symptoms and facial nerve dysfunction highlights the necessity of prompt diagnosis an institution of anti-Pseudomonas therapy. Our review suggests that this destructive bacterial infection is an emerging clinical entity in children; 73 per cent of the cases have been reported since 1980. Pediatricians should therefore be familiar with the clinical presentation of this treatable infection. Substantial morbidity could be alleviated by prompt diagnosis and early antibiotic treatment. Author.

Long-term treatment of disk-interference disorders of the temporomandibular joint with anterior repositioning occlusal splints. Okeson, J. P. Division of Masticatory Function, University of Kentucky, College of Dentistry, Lexington. *Journal of Prosthetic Dentistry* 1988 Nov, Vol. 60 (5), pp. 611–6.
Forty patients with three different types of symptomatic disk-interference disorders were treated with anterior repositioning splint therapy for eight weeks. At the end of that period 80 per cent of the patients were free of joint sound and pain. Each patient's splint was then gradually modified until the patient's original occlusal condition was reestablished. Each patient was then allowed to function in that position. The patients were reevaluated an average of two 1/2 years later. Seventy-five per cent of the patients had no joint pain and 66 per cent had a return of joint sounds. Sixty-six per cent of the patients did not find the need to seek additional treatment for jaw pain and dysfunction. Author.

Encephalomeningocele presenting with spontaneous cerebrospinal fluid rhinorrhea in an elderly man: case reprt. Dempsey, P. K., Harbaugh, R. E. Section of Neurosurgery, Dartmouth-Hitchcock Medical Center, Hanover, New Hampshire. *Neurosurgery* 1988 Nov, Vol. 23 (5), pp. 637–40.
The case of a patient with spontaneous cerebrospinal fluid (CSF) rhinorrhea from an intranasal encephalomeningocele is presented. The case is unusual in that the patient was entirely asymptomatic until the age of 65, when copious CSF rhinorrhea developed without trauma or operation as an inciting event. The pertinent literature is reviewed, and no identical case has been found. Author.

Stab wounds to the temporal fossa. Haworth, C. S., de-Villiers, J. C. Department of Neurological Surgery, University of Virginia School of Medicine, Charlottesville. *Neurosurgery* 1988 Oct, Vol. 23 (4), pp. 431–5.
Stab wounds to the temporal fossa appear as a characteristic clinical entity. Patients admitted with stab wounds to the head during the period 1970 to 1986 were reviewed retrospectively. Of these, ten met the criteria of having suffered a stab wound that penetrated the skull and dura mater of the temporal fossa. Injury to the internal carotid artery-cavernous sinus complex (three patients) or to the basilar artery-pons region (five patients) was frequent. Two other patients experienced injury to the trigeminal nerve and the petrous ridge. The mechanical, neurological, radiological, and prognostic features of knife wounds to this region are discussed. Author.

Aneurysm of the superficial temporal artery. Lee, K. S., Gower, D. J., McWhorter, J. M. Department of Surgery, Bowman Gray School of Medicine, Wake Forest University Medical Center, Winston-Salem, North Carolina. *Neurosurgery* 1988 Oct, Vol. 23 (4), pp. 499–500.
A young patient with the posttraumatic development of a superficial temporal artery (STA) aneurysm is described. The STA was ligated proximal and distal to the aneurysm, an the aneurysm was removed. The diagnosis and treatment of traumatic STA aneurysms are discussed. Author.

The effects of nasomaxillary injury on future facial growth. Precious, D. S., Delaire, J., Hoffman, C. D. Department of oral and Maxillofacial Surgery, Faculty of Dentistry, Dalhousie University, Halifax, Nova Scotia, Canada. *Oral Surgery, Oral Medicine, Oral Pathology.* 1988 Nov, Vol. 66 (5), pp. 525–30.
The appearance of results of injury to the columella, the nasal septum, and the nasal bones, in particular, has been well described. Anomalies of the maxilla and global facial balance secondary to nasomaxillary injury are less well known. Three cases involving children, aged 11, 14, and 17 years, who had suffered nasomaxillary injury at least eight years earlier as a result of physical beating, were studied with the use of photographs and architectural craniofacial lateral cephalometric radiographic analysis. The architectural craniofacial analysis of Delaire produced a graphic representation of the resultant maxillofacial deformities rather than a description of the deformities in terms of deviation from a statistical mean. Traumatic injury to the nasomaxillary complex provides an experimental model that implicates the role of the cartilaginous nasal septum and local functional conditions in the growth of the nasomaxillary complex. The importance of the functional premaxillary skeletal unit in balanced facial growth allows better understanding of the pathophysiology of malformation of this region. Author.

Blunt injuries of the cervical trachea: review of 51 patients. Reece, G. P., Shatney, C. H. Department of Surgery, University of Florida College of Medicine, University Hospital, Jacksonville. *Southern Medical Journal* 1988 Dec, Vol. 81 (12), pp. 1542–8.
The low incidence of blunt taruma to the cervival portion of the trachea limits management experience in most centres. Hence, we combined our patients with those in published reports containing essential information on injury, treatment, and results. Among 51 patients (93 per cent male), ages ranged from three to 65 years. There were 32 complete transections, 15 partial transections, and four tears. There were associated injuries of the recurrent laryngeal nerve (49 per cent), esophagus (21 per cent), larynx (14 per cent), and cervical spine (nine per cent). Presenting signs and symptoms included subcutaneous emphysema in 84 per cent, respiratory distress in 76 per cent, hoarseness/dysphonia in 46 per cent, and hemoptysis in 21 per cent. Tracheostomy was the best means of airway control; 13 of 17 (76 per cent) attempted oral/nasotracheal intubations failed, necessitating emergency tracheostomy. Five patients with no respiratory distress and minimal tissue injury were successfully managed without tracheal repair. Ten patients had tracheal repair without tracheostomy. The only poor result occurred in a patient with a treatment delay of several days. Tracheal repair with tracheostomy was used in 27 patients, with good results in 19. Two patients died of other injuries, and six patients (four with delayed repair) required subsequent tracheal reconstruction. Repair over a stent was used in seven patients, four of whom had satisfactory results. From this review we conclude that (1) the diagnosis of blunt trauma to the cervical trachea requires a high index of suspicion, since this injury can easily be overlooked; (2) tracheostomy (vs intubation or cricothyroidotomy) is the preferred means of airway control; (3) preoperative laryngoscopy/bronchoscopy should be done to assess vocal cord function, possible laryngeal damage, and level of tracheal injury; (4) good long-term results, measured by voice and airway quality, are best obtained by immediate repair of significant injuries. Author.

Massive schwannoma of the nose and paranasal sinuses. Ross, C., Wright, E., Moseley, J., Rees, R. Department of Plastic Surgery, Vanderbilt University Medical Center, Nashville, Tenn. *Southern Medical Journal* 1988 Dec, Vol. 81 (12), pp. 1588–91.
Schwannomas, uncommon tumours of the nose and paranasal sinuses, are discovered late in their clinical course because of their obscure anatomic location. In this report, we have described the clinical findings in a massive nasal schwannoma (neurilemoma) that obstructed both nares, the left maxillary sinus, and the ethmoid sinuses, and protruded from the oropharynx and nose. The preoperative work-up included both computerized tomographic and magnetic resonance imaging studies. Author.