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Abstract selection

Closure of nasal septal perforation with a cutaneous flap and a perichondrocutaneous graft. Ohlsen, L. Department of Plastic Surgery, University Hospital, Uppsala, Sweden. *Annals of Plastic Surgery* (1988) Sep, Vol. 21 (3), pp. 276–88.
A cutaneous flap from the cheek and a pericondrocutaneous free graft is used for closing a perforation of the nasal septum. The cutaneous flap is rotated to set into the defect covering one side of the perforation while the other side is covered with a free pericondrocutaneous graft, nutrified by vascular proliferation from the cutaneous flap. The anterior side of the auricular concha is used as donor site for the composite perichondrocutaneous graft. The cutaneous flap is divided after about four weeks. Twenty-eight patients have been operated on with this technique; 27 had a complete closure after an observation time of four to eight years. A biopsy three months after the operation showed that the pericondrium generated cartilage as supporting tissue. The technique was modified as using a labiobuccal flap showed unfavourable results. Author.

Dose-dependent effects of atropine sulfate on the brainstem and cortical auditory evoked potentials in the rat. Church, M. W., Gritzke, R. Department of Obstetrics/Gynecology, Wayne State University, School of Medicine, Detroit, MI 48201. *Brain Research* (1988) Jul 26, Vol. 456 (2), pp. 224–34.
Because brainstem auditory evoked potentials (BAEPs) are frequently recorded in anesthetized animals and humans, it is important to become familiar with the effects on the BAEP of drugs used during anesthesia, including pre-anesthetics. The dose-dependent and stimulus intensity-dependent effects on the BAEP of a pre-anesthetic, atropine sulfate, were studied in the unanesthetized rat. The animal subjects were 11 adult female Long-Evans rats. BAEPs in response to 0.1 ms clicks (12.5/s) were recorded from skull screw electrodes during a baseline period, as well as after saline and atropine treatments. Atropine sulfate was given i.p. in doses ranging from 0.250 to 40 mg/kg. Contrary to a prior report, doses in the standard pre-anesthetic range (i.e. 0.250-1.000 mg/kg) did not convincingly influence the BAEP. Only the highest dose (40 mg/kg) produced a significant and noteworthy change in the BAEP. This effect was characterized by significant amplitude increases in the P1, P2 and P3 components, but not in the P4, P5 and P6 components. This selective effect occurred at the highest stimulus intensity of 110 dB peak equivalent sound pressure level, but not at lower intensities. There were no convincing atropine-induced changes in BAEP latencies. Atropine-induced changes in the cortical auditory evoked potential (CAEP) were characterized by amplitude decrements. Thus, atropine seemed to have an excitatory effect on the BAEP and an inhibitory or depressive effect on the CAEP. Author.

Repair of subglottic stenosis with a free perichondrial graft. Ishikawa, K., Isshiki, N. Department of Plastic Surgery, Kyoto University School of Medicine, Japan. *British Journal of Plastic Surgery* (1988) Nov, Vol. 41 (6), pp. 652–6.
A case of tracheal stenosis was reconstructed, after trough formation, with a chondromucosal flap which was developed by submucous perichondrial grafting. At the first stage, a free perichondrial graft from the pinna was transplanted into the buccal submucosal layer. About 10 months later, when sufficient neocartilage had formed, the chondromucosal composite graft was transferred from the buccal region to the paratracheal subcutaneous region with the mucosa facing deeply. Finally, four weeks later the tracheal trough was closed with a composite rotation flap which incorporated the skin, neocartilage and mucosa. The postoperative course was uneventful and a wide tracheal lumen with a firm framework and mucous lining was confirmed by both fibrescopic and radiographic examination. Author.

The problem of neck relapse in early stage supraglottic larynx cancer. Levendag, P., Sessions, R., Vikram, B., Strong, E. W., Shah, J. P., Spiro, R., Gerold, F. Department of Radiation Oncology, Memorial Sloan-Kettering Cancer Center, New York, New York. *Cancer* (1989) Jan 15, Vol. 63 (2), pp.345–8.
We reviewed the records of 104 patients with Stage T1NO or Stage T2NO epidermoid carcinoma of the supraglottic larynx treated between 1965 and 1979. In 79 patients, surgery was the only type of initial treatment. These 79 patients are the subjects of this report. Forty-eight (61 per cent) of these patients were treated by total laryngectomy, whereas 31 (39 per cent) had a partial laryngectomy. An elective unilateral radical neck dissection was performed on 31 patients considered at high risk, but metastatic disease was found in the dissected side of the neck histologically in only 32 per cent (10 of 31) of these patients. The minimum follow-up period was five years and the maximum was 20 years. Twenty-nine per cent of the patients (23 of 79) experienced a neck relapse. The neck relapse rate was the same whether the patients did or did not have an elective radical neck dissection. Among the patients who experienced a neck relapse, 65 per cent (15 of 32) have died of the cancer. Among those who did not experience a neck relapse, none (zero of 56) have died of the cancer (P less than 0.01). These results indicate that in surgically treated patients with early stage supraglottic larynx cancer, neck relapse was the major cause of failure associated with death from cancer. Strategies for decreasing the relapse rate are discussed. Author.

High concentrations of chromium in lung tissue from lung cancer patients. Anttila, S., Kokkonen, P., Paakko, P., Rainio, P., Kalliomaki, P. L., Pallon, J., Malmqvist, K., Pakarinen, P., Nanto, V., Sutinen, S. Department of Pathology, University of Oulu, Finland. *Cancer* (1989) Feb 1, Vol. 63 (3), pp. 467–73.
The pulmonary chromium content was determined by plasma atomic emission spectrometer (DCP-AES) from 53 lung cancer and 43 control patients, and compared with smoking habits, severity of emphysema and occupational history. The chromium content from the lung cancer patients was higher than that from the smoking (P less than 0.025) or nonsmoking control patients (6.4 +/− 4.3, 4.0 +/− 4.0, and 2.2 +/− 0.6 microgram/g dry weight, respectively). A positive correlation between the pulmonary chromium and smoking time (P less than 0.025) and the severity of emphysema (P less than 0.001) was found in the control but not in the cancer patients. The difference in the pulmonary chromium content was greatest between those lung cancer and control patients who were light smokers or had mild emphysema. This group of lung cancer patients included subjects with occupational exposure to chromium. The possibility of occupational cancer should be considered especially with light smokers. The grade of emphysema and metals such as chromium accumulating from tobacco could serve as objective indicators of smoking. Author.

Massive tracheal necrosis complicating endotacheal intubation. Abbey, N. C., Green, D. E., Cicale, M. J. University of Florida College of Medicine, Department of Medicine, Gainesville. *Chest* (1989) Feb, Vol. 95 (2), pp. 459–60.
There are significant complications associated with endotracheal intubation. Massive tracheal necrosis secondary to tracheoesophageal space abscess developed in a 71-year-old man during mechanical ventilation. Elevated endotracheal tube cuff pressures, sepsis, hypotension, and other risk factors predispose to this disastrous consequence. Author.

Rapid development of cor pulmonale following acute tonsillitis in adults. Randall, C. S., Braman, S. S., Millman, R. P. Division of Pulmonary and Critical Care Medicine, Rhode Island Hospital 02903. *Chest,* (1989) Feb, Vol. 95 (2), pp. 462–3.
We describe two adult patients in whom acute tonsillitis resulted in

the rapid development of cor pulmonale in the absence of clinically evident upper airway obstruction or diffuse obstructive airway disease. Both patients had developed symptoms of sleep apnea and all-night polysomnography confirmed the presence of severe obstructive sleep apnea. These cases emphasize the potentially severe cardiovascular consequences of acute tonsillar hypertrophy in the obese adult patient. Author.

Elevation of bone conduction threshold in children with middle ear effusion. Kobayashi, K., Kodama, H., Takezawa, H., Suzuki, T., Kataura, A. Department of Otolaryngology, Sapporo Medical College, Japan. *International Journal of Pediatric Otorhinolaryngology* (1988) Nov, Vol. 16 (2), pp. 95–100.
A retrospective study of children having otitis media with effusion revealed fluctuations in bone conduction thresholds as well as in air conduction thresholds. Previous investigations in this area presented both low- and high-tone bone conduction hearing loss which were reversible. We conducted a detailed study including complete otologic, audiologic and tympanometric evaluation of 27 (41 ears) children who had fluctuating bone conduction hearing loss. From these audiologic examinations, three types of bone conduction hearing loss could be classified: high-tone, low-tone and flat-type bone conduction hearing loss. We observed the shift of bone conduction thresholds in children after removal of middle-ear fluids by the appropriate medical management. Author.

Rhinomanometrical findings after septoplasty in children. Risavi, R., Pisl, Z., Sprem, N., Klapan, I. Clinic for Otorhinolaryngology and Cervicofacial Surgery, Medical Faculty, Zagreb, Yugoslavia. *International Journal of Pediatric Otorhinolaryngology* (1988) Nov, Vol. 16 (2), pp. 149–55.
Forty children of both sexes, aged 5-12, with deviations or fractures of the nasal septum were tested. These children were selected for septoplasty on the basis of anamnestic data, ENT examination and anterior rhinomanometry with and without anamnestic data. The control group consisted of 15 children, of approximately the same age and sex distribution, with normal nose breathing and rhinomanometrical findings. The operated group underwent clinical and rhinomanometrical examination three and 12 months after surgery, and the control group 12 months after the initial examination. Septoplasty was performed under general anaesthesia with locally applied vasoconstrictors. The results showed that rhinomanometrical resistances prior to surgery were significantly higher in all the subjects in the operated group than those in the control group. Rhinomanometrical resistances were lower in 29 operated cases three months after septoplasty than before septoplasty, and significantly lower in 32 operated cases 12 months after septoplasty. Rhinomanometrical resistances in the operated group 12 months after surgery were a little higher than those in the control group 12 months after the initial examination. Failures and complications after septoplasty are commented upon, as is their influence on rhinomanometrical resistances. Author.

Fluctuating hearing losses in children can be migraine equivalents. Bernard, P. A., Stenstrom, R. J. Children's Hospital of Eastern Ontario, Division of Otolaryngology, Ottawa, Canada. *International Journal of Pediatric Otorhinolaryngology* (1988) Nov, Vol. 16 (2), pp. 141–8.
Fluctuation of hearing thresholds in an already severely to profoundly deaf child constitutes a stressing condition and a therapeutic challenge. Thorough medical inquiries revealed strong histories of migraine headaches in the parents of 13 severely deaf children (mean age: 7 years) and two of them also presented symptoms of migraine. This disease is viewed as a form of a relatively benign cerebral vasospasm causing an intense transitory vasodilatation of the small vessels of the brain and a subsequent sterile inflammatory reaction. Liberation of histamine, serotonin and plasma kinins appear to interfere with the metabolism of nerve cells. All children in our study had suffered from anoxia at birth, a condition related to a depopulation of cochlear brainstem nuclei. Migraines may therefore produce obvious hearing symptoms when vasomotor disturbances occur in already damaged nervous structures. Treatment with propranolol hydrochloride (HCl), a potent beta-blocker, resulted in cessation of hearing fluctuations in all patients and in an improvement of thresholds in two of them. We presented our results, as well as preliminary studies on asphyxiated rats shortly after birth, with transitory artificially induced cerebral vasodilatation. Author.

The value of treatment planning using CT and an immobilizing shell in radiotherapy for paranasal sinus carcinomas. Tsujii, H., Kamada, T., Matsuoka, Y., Takamura, A., Akazawa, T., Irie, G. Department of Radiology, Hokkaido University School of Medicine, Sapporo, Japan. *International Journal of Radiation Oncology, Biology and Physics,* (1989) Jan, Vol. 16 (1), pp. 243–9.
This article describes a method which uses CT scans and immobilizing shells radiation treatment planning (CT-assisted planning) for paranasal sinus carcinomas and the value of this method on the treatment outcome. Results of the treatment for 82 patients who had CT-assisted planning were compared with that of 88 patients who had no such treatment planning. It has been concluded that the combined use of CT and the shell in treatment planning permitted a 3-dimensional localization of both the tumor and critical normal structures with great accuracy, leading to an improved long-term survival and a reduced complication rate. The multivariate regression analysis for predicting significant prognostic factors also confirmed the valuable role of CT in terms of survival and primary tumor control. The actuarial 5-year survival rate was 51 per cent in all patients, control. The actuarial 5-year survival rate was 51 per cent in all patients, whereas, by using CT-assisted planning, it was improved to 61 per cent. The improved survival was observed among the patients with tumors of the suprastructures where tumors were located adjacent to the critical organs (brain and eye). Major complications attributable to radiation have included instances of brain and ocular damage. CT-assisted planning, however, has been proven effective in avoiding brain necrosis and preserving eye sight. Author.

Flexible fiberoptic rhinoscopy in the diagnosis of sinustitis. Castellanos, J., Axelrod, D. Department of Internal Medicine, Mount Carmel Mercy Hospital, Detroit, MI 48235. *Journal of Allergy and Clinical Immunology,* (1989) Jan, Vol. 83 (1), pp. 91–40.
Two-hundred and forty-six patients with undiagnosed headache, after unrewarding neurologic evaluation, were referred to an allergy clinic and were evaluated both by routine sinus radiographs and flexible fiberoptic rhinoscopy. Ninety-eight patients had only rhinoscopic evidence of sinusitis (group I), 84 patients had both rhinoscopic and radiographic evidence of sinusitis (group II), and 64 patients had neither rhinoscopic nor radiographic evidence of sinusitis (group III). Antibiotic treatment resulted in relief of headaches in 94 per cent of group I, 75 per cent of group II, and 5 per cent of group III patients. The distribution of sinus infections found by both rhinoscopy and radiography were similar; however, rhinoscopy may have found the disease earlier than radiography. Flexible fiberoptic rhinoscopy is an efficient method for the office diagnosis of sinusitis. Author.

Association of class II DNA restriction fragments with responsiveness to Ambrosia artemisiifolia (short ragweed)-pollen allergen Amb a V in ragweed-allergic patients. Zwollo, P., Ansari, A. A., Marsh, D. G. Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD 21239. *Journal of Allergy and Clinical Immunology* (1989) Jan, Vol. 83 (1), p. 45–54.
Human IgE and IgG antibody responsiveness to the shorter ragweed-pollen allergen Amb a V (formerly known as Ra5) has been found to be strongly associated with HLA-D specificities Dw2 and DR2 in ragweed-allergic white individuals. To study the molecular basis of these associations, restriction fragment length polymorphism (RFLP) mapping was performed on a group of 45 white ragweed-allergic patients with full-length HLA-DR beta, DQ beta, and DQ alpha cDNA probes. The data on 41 of these subjects were used for the purposes of statistical analysis. With the DR beta probe, we found that the presence of three polymorphic restriction fragments correlated with resposiveness to Amb a V and with the DR2 specificity, namely, a 6.5 kb Eco RI fragment, a 9.4 kb Hind III fragment, and a 2.2 kb Hind III fragment. The presence of four fragments detected with the DB beta probe correlated with responsiveness to Amb a V and with Dw2 specificity: a 2.3 kb Eco RI fragment, a 13.0 kb Pst I fragment, a 2.9 kb Taq I fragment, and a 5.2 kb Eco RV fragment. The DR beta Eco RI 6.5 kb and the DQ beta Eco RI 2.3 kb fragments were studied in detail; the concordant presence of these fragments was even more strongly associated with responsiveness to Amb a V. Fifteen of 17 responders had both fragments, whereas only one of 24 nonresponders had both fragments ($p=5\times10(-7)$). This is the first time that such an association has been found between a person's immune response to a

well-defined antigen and a set of HLA class II DNA restriction fragments. Author.

Gustatory rhinitis: a syndrome of food-induced rhinorrhea. Raphael, G., Raphael, M. H., Kaliner, M. Allergic Diseases Section, National Institute of Allergy and Infectious Diseases, Bethesda, MD 20892. *Journal of Allergy and Clinical Immunlogy* (1989) Jan, Vol. 83 (1), pp. 110–5.
The consumption of certain foods causes watery rhinorrhea (gustatory rhinitis) in many individuals. To examine the underlying mechanisms responsible for this common phenomenon, 12 subjects ingested control foods and positive foods (foods that cause rhinorrhea). Nasal lavages performed 10 minutes after each food challenge were analyzed for albumin and total protein. Positive food challenge, but not control food challenge, induced rhinorrhea in all subjects. Positive food challenge increased albumin (7.8 +/− 1.9 to 24.5 +/− 7.6 mg/L; p less than 0.025) and total protein (79 +/− 9 to 258 +/− 41 mg/L; p less than 0.001) without altering the ratio of albumin to total protein (albumin percent). Nasal pretreatment with atropine clinically blocked the positive food-induced rhinorrhea and significantly inhibited secretion of both albumin and total protein, again without affecting the albumin percent. Thus, gustatory rhinitis is produced by spicy foods that stimulate atropine-inhibitable muscarinic receptors (probably on submucosal gands), and the syndrome can be treated prophylacticlly by use of topical atropine. Author.

Bacteremia associated with tympanostomy tube insertion (letter). Lohr, J. A., Sloop, F. B., Syndrome, A. Jr., Donowitz, L. G. *Journal of Infectious Diseases* (1989) Mar, Vol. 159 (3), pp. 594–5.

Juvenile laryngeal papillomatosis and epidermoid carcinoma. Chaput, M., Ninane, J., Gosseye, S., Moulin, D., Hamoir, M., Claus, D., Francis, C., Richard, F., Vermylen, C., Cornu, G. Department of Pediatric Hematology, Universitaires Saint-Luc, Brussels, Belgium. *Journal of Pediatrics* (1989) Feb, Vol. 114 (2), pp. 269–72.

Multisensory speech perception by profoundly hearing-impaired children. Lynch, M. P., Eilers, R. E., Oller, D. K., Cobo, Lewis, A. *Journal of Speech and Hearing Disorders* (1989) Feb, Vol. 54 (1), pp. 57–6.
Four children in Study 1 (ages 5–7 years) and 4 children in Study 2 (ages 8–11 years) received unimodal (tactual) word recognition training with tactual speech perception aids. Two of the subjects in Study 1 were trained with a 2-channel device and 2 with a 16-channel aid. All of the subjects in Study 2 used a 16-channel aid. Following training, subjects were tested on a list containing equal numbers of trained words and of tactually new words in three conditions: (a) aided hearing alone (H), (b) tactual aid alone (TA), and (c) combined (TA+H). Results indicate that subjects peformed significantly better in the combined condition on both trained and tactually new words, providing evidence for significant sensory integration following unimodal training. Author.

Otitis media and congenital perilymphatic fistula as a cause of sensorineural hearing loss in children. Bluestone, C. D. Otitis Media Research Center of Children's Hospital of Pittsburgh, PA 15213-3417. *Journal of Pediatric Infectious Diseases* (1988) Nov, Vol. 7 (11 Suppl), pp. S141-5.
In all infants and children who have progressive, fluctuating or sudden sensorineural hearing loss, the possibility of a congenital perilymphatic fistula should be considered. Factors determined to be highly suggestive of the presence of a congenital perilymphatic fistula as the cause of senorineural hearing loss or vertigo, or both, include the following: mixed conductive and sensorineural hearing loss; antecedent sudden physical exertion or barotrauma; congenital deformities of the external ear and head; and abnormal findings on computed tomograms of the temporal bone, especially Mondini-like ear dysplasias. In a series of 37 children who had a congenital perilymphatic fistula treated at the Children's Hospital of Pittsburgh, 28 (76 per cent) had had documented otitis media in the past or a history of middle ear disease. This finding should altert the clinician to the possibility of the presence of a congenital perilymphatic fistula when sensorineural hearing loss develops or progresses during an episode of otitis media. Perilymphatic fistula is caused by either congenital ossicular deformities or abnormalities of the labyrinthine windows or coexistence of both conditions. The likelihood of there being no further deterioration in hearing after surgical repair of a perilymphatic fistula is high. Every infant and child with unexplained hearing loss or disequilibrium or both deserves an attempt to uncover the cause at the earliest possible age. Author.

Management of otitis media in infants and children: current role of old and new antimicrobial agents. Bluestone, C. D. Otitis Media Research Center, Children's Hospital of Pittsburgh, PA 15213-3417. *Journal of Pediatric Infectious Diseases* (1988) Nov, Vol. 7 (11 Suppl), pp. S129–36.
Otitis media, the diagnosis most frequently made by the pediatrician, is most effectively treated with antimicrobial therapy. Amoxicillin (or ampicillin) has been the standard for infants and children with acute otitis media because it is safe and effective for most of the causative bacterial pathogens. Amoxicillin has also been shown to be effective for treatment of some children with otitis media with effusion ("secretory" otitis media) and is the recommended prophylactic antimicrobial agent for prevention of frequently recurrent acute otitis media. However, during the past decade there has been an increasing rate of bacteria that are resistant to amoxicillin, primarily beta-lactamase-producing. Haemophilus infuenzae and Branhamella catarrhalis. Because of the emergence of these bacteria, other antimicrobial agents both old and new have been avocated for treatment and prevention of otitis media; amoxicillin-clavulanate and cefuroxime axetil are the newer agents. These agents are indicated for selected infants and children but for most patients amoxicillin remains a safe and relatively inexpensive effective "old friend". Author.

Long-term follow-up after occlusal treatment to correct abnormal temporomandibular joint disk position. Lundh, H., Westesson, P. L. Department of Stomatognathic Physiology, University of Lund, School of Dentistry, Malmo, Sweden. *Oral Surgery, Oral Medicine, Oral Pathology* (1989) Jan, Vol. 67 (1), pp. 2–10.
Fifteen patients with temporomandibular joint disk displacement in whom a normal condyle-disk relationship could be established were treated with occlusal changes to maintain the disk in a recaptured position. Occlusal changes were achieved by prosthodontics in 11 patients and by orthodontics in four patients. Follow-up after about three years showed that joint function was improved, intensity of pain was reduced, and joint and muscle tenderness were less frequent than before treatment. Intermittent locking, use of analgesics, sleep disturbances, and absence from work because of temporomandibular joint symptoms were also less frequent. Radiographic examination performed in 11 patients at follow-up demonstrated anteroinferior condylar position in the majority of the patients, but only minor hard tissue changes. Arthrography showed the disk to be in a correct position relative to the condyle in 82 per cent (9 of 11) of the patients. These results suggest that permanent change of the occlusion with the objective of eliminating abnormal disk position may be effective treatment for disk displacement when conventional methods of treatment have failed to alleviate the symptoms. The extent of dental treatment needed to maintain the disk in a correct position should, however, be considered relative to the severity of the symptoms. Author.

A classification of temporomandibular joint disk morphology. Heffez, L., Jordan, S. University of Illinois, Chicago. *Oral Surgery, Oral Medicine, Oral Pathology* (1989) Jan, Vol. 67 (1), pp. 11–9.
Disk morphology has been recognized as an important feature of internal derangements of the temporomandibular joint and as a suspect in functional impediments. A classification of disk shapes was devised by means of corrected lateral cephalometric arthrotomograms and histopathologic sagittal sections. Five basic shapes were identified: bow tie (normal), straight, funnel, bulge, and Y. Statistical analyses were performed. The normal condyle-disk-fossa relationship and slight-to-moderate disk displacement occurred with disk shape 1 (bow tie). Severe disk displacement without reduction occurred predominantly with disk shape 4 (bulge). Beaking of dye in the anterior recess of the inferior joint space was an indicator of abnormal disk morphology and displacement. Author.

Clinical evaluation of a latex agglutination test for streptococcal pharyngitis: performance and impact on treatment rates. Lieu, T. A., Fleisher, G. R., Schwartz, J. S. Dana Scholars program, Uni-

versity of Pennsylvania, Philadelphia. *Pediatric Infectious Diseases* (1988) Dec, Vol. 7 (12), pp. 847–54.
The accuracy and clinical utility of a latex agglutination test were compared with anaerobic throat culture on selective media for detection of Group A streptococcal pharyngitis in an urban pediatric emergency department. Among 255 symptomatic cases prevalence of positive culture was 29 per cent and antigen test sensitivity was 55 per cent. Among 100 asymptomatic controls prevalence of positive culture was 20 per cent and antigen test sensitivity was 20 per cent. Controls with positive cultures and cases with false negative antigen tests had significantly fewer colonies on culture than cases with true positive antigen tests (P less than 0.01). Symptoms and clinical findings were not associated with antigen test result or number of colonies on culture. Eighty per cent of patients with positive cultures received treatment when the antigen test was used as an adjunct to culture, compared with a 57 per cent treatment rate among the subgroup in whom follow-up treatment was attempted based on positive culture results alone (P less than 0.05). We conclude that: (1) the antigen test had lower sensitivity in routine clinical use than previously reported; (2) the high rate of false negative tests may result, in part, from a high proportion of specimens with low colony counts; and (3) the availability of the antigen test as an adjunct to culture significantly increased treatment rates. Author.

Laryngospasm-induced pulmonary edema. Szucs, R. A., Floyd, H. L. Department of Radiology, Medical College of Virginia Hospitals, Richmond 23298. *Radiology* (1989) Feb, Vol. 170 (2), pp. 446.
Pulmonary edema after relief of airway obstruction due to laryngospasm is an uncommon but recognized entity. The authors report a case of a previously healthy young man who developed pulmonary edema after relief of laryngospasm following extubation of the trachea. Pulmonary edema after relief of acute airway obstruction should be included in the differential diagnosis of noncardiogenic pulmonary edema in the appropriate clinical setting. Author.