

Abstract Selection

Arytenoid cartilage dislocation caused by a double-lumen endobronchial tube

Mikuni I, Suzuki A, Takahata O, Fujita S, Otomo S, Iwasaki H. Department of Anesthesiology and Critical Care Medicine, Asahikawa Medical College, Asahikawa, Japan. subetenakusitamamani@yahoo.co.jp.

British journal of anaesthesia (2006) Jan (epub: 25 Nov 2005), Vol. 96, pp. 136–8, ISSN: 0007-0912.

Following surgery requiring the use of a double-lumen endobronchial tube, a patient immediately complained of persistent severe hoarseness. On the third day after the operation, fiberoptic laryngoscopy revealed posterolateral dislocation of the left arytenoid cartilage. By the sixth day of the operation, a slight improvement was observed in the hoarseness without treatment and a spontaneous recovery of arytenoid cartilage dislocation was expected. The patient did not consent to surgical treatment, and therefore a conservative therapy was selected. Ten weeks after the operation, it was found that the dislocated left arytenoid cartilage had spontaneously repositioned and the patient regained his normal voice. The causes and treatment options are discussed.

Team working to improve outcome in vestibular schwannoma surgery

Sharp MC, MacArlane R, Hardy DG, Jones SEM, Baguley DM, Moffat DA.

Department of Neurosurgery, Addenbrooke's Hospital, Cambridge, UK.

British journal of neurosurgery (2005) Apr, Vol. 19, pp. 122–7, ISSN: 0268-8697.

The concept of the 'learning curve' in the early years of consultant appointment is no longer acceptable and yet, for most complex operations, learning is a career-long process. Sub-specialization offers part of the solution to this problem by concentrating expertise, but there remains the question of how to introduce new team members without adversely affecting patient outcome. Shortened training and an increasingly aware public, who are more questioning of the experience and outcomes of those treating them, has required the surgical profession to move away from individual consultant practice and embrace team-working. When, in 1997, a second neurosurgeon joined the skull base team at Addenbrooke's Hospital, his introduction to acoustic neuroma surgery was mentored and operative cases were carefully selected at first. In this article, we discuss our experience with consultant mentoring, and compare the results of the first 100 translabyrinthine acoustic neuroma operations performed under this system with the first cohort of a similar number of patients published from Cambridge in 1989.

Single dose topical corticosteroid inhibits IL-5 and IL-13 in nasal lavage following grass pollen challenge

Erin EM, Leaker BR, Zacharasiewicz AS, Higgins LA, Williams TJ, Boyce MJ, de Boer P, Durham SR, Barnes PJ, Hansel TT.

National Heart and Lung Institute (NHLI) Clinical Studies Unit, Imperial College, London, UK.

Allergy (2005) Dec, Vol. 60, pp. 1524–9, ISSN: 0105-4538.

Background Nasal lavage is a noninvasive method of obtaining inflammatory exudates following nasal allergen challenge (NAG), and permits cells and released mediators to be evaluated.

Objective To determine the effects of a single dose of topical steroid on eosinophils and levels of chemokines and cytokines in nasal lavage fluid following NAG in patients with allergic rhinitis.

Methods Patients with grass pollen seasonal allergic rhinitis ($n = 32$) out of the allergy season received either nasal budesonide (100 microg per nostril) or matched placebo before allergen

challenge in a double blind two-way crossover design. A semi-automated mixed bead array system was employed to measure multiple chemokines and cytokines in small volumes (50 microl) of nasal lavage supernatants.

Results Following NAC there was a rapid onset of nasal symptoms together with nasal eosinophilia, and the appearance of IL-5 and IL-13 in lavages between 4 and 8 h. Elevated levels of eotaxin, RANTES, IL-8 and MCP-1 were also detected following allergen challenge. A single dose of nasal budesonide caused a decrease in symptoms ($P < 0.05$) and nasal eosinophils ($P < 0.05$) with selective abrogation of IL-5 and IL-13 responses ($P < 0.05$), but a lack of effect on levels of eotaxin, RANTES, IL-8 and MCP-1.

Conclusion This study suggests that a single dose of nasal steroid has the capacity to selectively abolish IL-5 and IL-13 responses following NAC. This model should be convenient for testing novel anti-inflammatory and immunoregulatory agents intended for the treatment of allergic rhinitis.

An atypical presentation of adenoid cystic carcinoma of the lacrimal gland

Tse David T, Benedetto Pasquale, Morcos Jacques J, Johnson Thomas E, Weed Donald, Dubovy Sander.

Department of Ophthalmology, University of Miami-Miller School of Medicine, 900 NW 17th Street, Miami, FL 33136, USA. dtse@med.miami.edu.

American journal of ophthalmology (2006) Jan, Vol. 141, pp. 187–9, ISSN: 0002-9394.

Purpose To report a case of lacrimal gland adenoid cystic carcinoma (ACC) with an atypical initial presentation and to postulate an anatomical explanation for this unusual biologic behavior.

Design Interventional case report.

Methods An orbital magnetic resonance imaging study of a 58-year-old man who complained of progressive diplopia and orbital discomfort disclosed a soft tissue mass in the left cavernous sinus and orbital apex. The left lacrimal gland and the contiguous bone appeared normal.

Results Biopsy of the intracranial mass revealed ACC of unknown origin which was judged to be unresectable. He underwent two cycles of intraarterial cytoreductive chemotherapy followed by a left medial maxillectomy with sphenoidectomy, orbital exenteration, and chemoradiation. ACC tumor cells were identified in nerve fiber bundles surrounding and within the lacrimal gland.

Conclusions In patients presenting with an infiltrative mass in the cavernous sinus or orbital apex, metastatic disease from an occult lacrimal gland primary should be considered, even with a normal-appearing lacrimal gland. Grant ID: P30 EY 014801, Acronym: EY, Agency: NEI.

Pathogenesis of obstructive and central sleep apnea

White David P.

Brigham and Women's Hospital Division of Sleep Medicine, Sleep Research at BL, 75 Francis Street, Boston, MA 02115, USA. dpwhite@rics.bwh.harvard.edu.

American journal of respiratory and critical care medicine (2005) Dec (epub: 11 Aug 2005), Vol. 172, pp. 1363–70, 87 refs, ISSN: 1073-449X.7

Considerable progress has been made over the last several decades in our understanding of the pathophysiology of both central and obstructive sleep apnea. Central sleep apnea, in its various forms, is generally the product of an unstable ventilatory control system (high loop gain) with increased controller gain (high hypercapnic responsiveness) generally being the cause. High plant gain

can contribute under certain circumstances (hypercapnic patients). On the other hand, obstructive sleep apnea can develop as the result of a variety of physiologic characteristics. The combinations of these may vary considerably between patients. Most obstructive apnea patients have an anatomically small upper airway with augmented pharyngeal dilator muscle activation maintaining airway patency awake, but not asleep. However, individual variability in several phenotypic characteristics may ultimately determine who develops apnea and how severe the apnea will be. These include: (1) upper airway anatomy, (2) the ability of upper airway dilator muscles to respond to rising intrapharyngeal negative pressure and increasing Co(2) during sleep, (3) arousal threshold in response to respiratory stimulation, and (4) loop gain (ventilatory control instability). As a result, patients may respond to different therapeutic approaches based on the predominant abnormality leading to the sleep-disordered breathing.

Inlet patch of gastric mucosa in upper esophagus causing chronic cough and vocal cord dysfunction

Silvers William S, Levine Joel S, Poole Jill A, Naar Erick, Weber Richard W.

Allergy, Asthma, & Immunology Clinic of Colorado, Englewood, Colorado 80111, USA. skiersnoz@silversmd.com.

Annals of allergy asthma & immunology: official publication of the American College of Allergy Asthma & Immunology (2006) Jan, Vol. 96, pp. 112–5, ISSN: 1081-1206.

Background An inlet patch of gastric mucosa in the upper esophagus is usually an incidental, congenital finding found during upper gastrointestinal tract endoscopy. Although it has been reported to cause dysphagia, strictures, adenocarcinoma, and webs, it has never been associated with cough and vocal cord dysfunction.

Objective To report the first case of a patient with an inlet patch of gastric mucosa in the upper esophagus as the cause of a particularly troublesome, chronic cough that was initially missed on 2 upper endoscopies.

Methods The patient is a 50-year-old man with a 7-year history of chronic cough associated with hoarseness, shortness of breath, and globus sensation. For diagnostic evaluation, pulmonary function tests, chest computed tomography, rhinolaryngoscopy, upper gastrointestinal tract endoscopy, and histologic examinations were performed.

Results A multidisciplinary approach revealed several possible causes for the chronic cough, including vocal cord dysfunction, postnasal drip syndrome, allergic rhinitis, and mild gastroesophageal reflux disease that was only partially responsive to therapy. The results of 2 initial upper gastrointestinal tract endoscopies were interpreted as normal. A third endoscopy detected an inlet patch of gastric mucosa in the upper esophagus. Treatment with a high-dose histamine type 2 receptor antagonist and a proton pump inhibitor alleviated the patient's symptoms.

Conclusions An inlet patch of gastric mucosa in the upper esophagus is not uncommon, but it is often overlooked or believed to be an incidental, congenital finding. This is the first report, to our knowledge, of an inlet patch resulting in a troublesome, chronic cough.

The role of positron emission tomography and computed tomography fusion in the management of early-stage and advanced-stage primary head and neck squamous cell carcinoma

Ha Patrick K, Hdeib Alia, Goldenberg David, Jacene Heather, Patel Pavni, Koch Wayne, Califano Joseph, Cummings Charles W, Flint Paul W, Wahl Richard, Tufano Ralph P.

Department of Otolaryngology-Head and Neck Surgery and Nuclear Medicine, The Johns Hopkins University School of Medicine, 601 N, Caroline Street, Baltimore, MD 21287-0910, USA.

Archives of otolaryngology-head & neck surgery (2006) Jan, Vol. 132, pp. 12–6, ISSN: 0886-4470.

Objective To evaluate the role of positron emission tomography and computed tomography (PET-CT) fusion in the management of early-stage and advanced-stage primary head and neck squamous cell cancer.

Design Retrospective analysis, with a blinded evaluation of clinical data and formation of a treatment plan.

Setting Single tertiary academic medical institution. Patients Thirty-six patients with previously untreated head and neck squamous cell

carcinoma who underwent staging CT or magnetic resonance imaging of the neck prior to undergoing PET-CT as part of their initial diagnostic evaluation between July 2000 and January 2005.

Main outcome measures Confirmation or alteration of the treatment plan with the addition of the PET-CT information compared with traditional clinical and radiological data alone for early-stage and advanced-stage disease. When available, histopathological results were correlated with the PET-CT findings.

Results Among the 36 patients, PET-CT provided additional information that confirmed the treatment plan in 25 patients (69%) and altered the treatment plan in 11 patients (31%). Six of 11 patients in the altered-treatment group had their tumors upstaged. Four of 8 patients with early-stage tumors had their treatment plan altered, compared with 7 of 28 patients with advanced-stage disease. Among 18 patients who underwent a surgical intervention for their primary tumor, PET-CT identified the primary tumor in all 18 patients and, based on histopathological findings, correctly staged the regional nodal disease in 9 of 16 patients who had their nodal disease addressed.

Conclusion The use of PET-CT is important in the initial treatment planning of early-stage and advanced-stage head and neck squamous cell carcinoma.

Complications in head and neck surgery: a meta-analysis of postlaryngectomy pharyngocutaneous fistula

Paydarfar Joseph A, Birkmeyer Nancy J.

Division of Otolaryngology-Head & Neck Surgery, Norris Cotton Cancer Center, Dartmouth Medical School, Dartmouth-Hitchcock Medical Center, Lebanon, NH 03756, USA.

Archives of otolaryngology-head & neck surgery (2006) Jan, Vol. 132, pp. 67–72, ISSN: 0886-4470.

Objective To summarize the potential risk factors for postlaryngectomy pharyngocutaneous fistula.

Data sources Observational studies in the English-language literature about postlaryngectomy pharyngocutaneous fistula from January 1, 1970, to March 31, 2003. Studies were identified through a MEDLINE search with relevant key words; additional studies were identified through references.

Study selection We included studies about the site of primary malignancy, type of procedure, and type of closure; studies had to have been based on individual-level data, with a comparison group for each risk factor evaluated.

Data extraction Data required to calculate the relative risk of fistula associated with commonly reported risk factors were abstracted from the studies, and a meta-analysis using a random-effects approach was performed to estimate a summary relative risk of fistula for each risk factor. The statistical significance of heterogeneity of effects among studies was assessed.

Data synthesis Of 65 studies identified, 26 met the inclusion criteria. Significant risk factors identified in the pooled analysis included postoperative hemoglobin level less than 12.5 g/dL, prior tracheotomy, preoperative radiotherapy, and preoperative radiotherapy and concurrent neck dissection. The degree of heterogeneity of effects among studies was significant for postoperative hemoglobin level, preoperative radiotherapy, concurrent neck dissection, and comorbid illness. The severity of fistula was greater in patients with a history of radiotherapy.

Conclusions This meta-analysis identified several significant risk factors for postlaryngectomy pharyngocutaneous fistula. The clinical implications of these findings and the potential sources of heterogeneity of effects among studies are discussed.

Pressure-equalizing earplugs do not prevent barotrauma on descent from 8000 ft cabin altitude

Klokker Mads, Vesterhauge Soeren, Jansen Erik C.

Aviation Medical Center & Dept. of Otorhinolaryngology, Head & Neck Surgery, Rigshospitalet, Copenhagen University Hospital, Blegdamsvej 9, DK-2100 Copenhagen, Denmark. klokker@dadlnet.dk.

Aviation space and environmental medicine (2005) Nov, Vol. 76, p. 1079–82, ISSN: 0095-6562.

Introduction The aim of this study was to evaluate the effect of pressure-equalizing earplugs available in major airports and

drugstores. No previous study has focused on preventing barotrauma using these earplugs.

Methods Blinded and double-blinded, one type of pressure-equalizing earplugs (JetEars) was studied in 27 volunteers disposed to ear barotrauma. They acted as their own controls with an active earplug in one ear and a placebo earplug in the other ear at random. All were exposed to the same well-defined pressure profile for 1 h at 8000 ft, comparable to the environment in civil commercial air travel in a pressurized cabin. Satisfaction was assessed by questionnaire and objective results were evaluated prior to and after the pressure exposure by tympanometry and otoscopy using the Teed classification.

Results The majority of the volunteers (78%) reported a pleasant noise-reducing feeling using the earplugs. However, 75% also experienced ear pain during descent. In comparing the middle ear pressure before and after pressurization, a decrease was found in ears with both active earplugs and placebo earplugs. No difference between the active and the placebo earplugs were found. Furthermore, after evaluation of the two groups of ears using otoscopy, no prevention of barotrauma was found. In fact, the ears using an active pressure-equalizing earplug scored significantly worse ($P = 0.033$).

Conclusions Feelings of noise reduction were reported, but no prevention of barotrauma could be demonstrated with the use of pressure-equalizing earplugs. Pressure-equalizing earplugs cannot be recommended in air travel for preventing ear barotrauma.

Effects of VHL deficiency on endolymphatic duct and sac

Glaesker Sven, Lonser Russell R, Tran Maxine GB, Ikejiri Barbara, Butman John A, Zeng Weifen, Maxwell Patrick H, Zhuang Zhengping, Oldfield Edward H, Vortmeyer Alexander O. Surgical Neurology Branch, National Institute of Neurological Disorders and Stroke, NIH, Bethesda, Maryland 20892, USA. *Cancer research* (2005) Dec, Vol. 65, pp. 10847–53, ISSN: 0008-5472.

The von Hippel-Lindau (VHL) disease is caused by VHL germ line mutation. Inactivation of the wild-type copy of the VHL gene leads to up-regulation of hypoxic response and tumor formation within central nervous system (CNS), kidneys, pancreas, adrenal glands, epididymis, broad ligament, and the endolymphatic sac/petrous bone. Endolymphatic sac tumors (ELST) have been proposed to be derived from endolymphatic sac epithelium, but other possible structures of origin have been implicated. To clarify the anatomic and cellular origin of ELSTs, we did a morphologic and molecular pathologic analysis of 16 tumors. In addition, we investigated effects of VHL deficiency on tumor-free endolymphatic duct and sac of VHL patients. Several tumors included in this study were <1 cm in size, and their origin could be placed in the intraosseous portion of the endolymphatic duct/sac. Furthermore, by analysis of clinically uninvolved tumor-free endolymphatic duct and sac tissues of VHL patients, we discovered a variety of VHL-deficient microscopic abnormalities with morphologic similarities to ELSTs. We conclude that most, if not all, ELSTs arise within the intraosseous portion of the endolymphatic duct/sac, the vestibular aqueduct. In analogy to renal parenchyma and selected topographical sites within the CNS, endolymphatic duct/sac epithelia are preferentially and multifocally targeted in VHL disease. The primary effect of VHL deficiency on human endolymphatic duct/sac epithelium seems to be the generation of multifocal sites of VHL-deficient cell proliferations from which tumorigenesis may or may not occur. Therefore, inactivation of the VHL wild-type allele seems necessary but not sufficient for the formation of tumor.

Preferred antibiotics for treatment of acute otitis media: comparison of practicing pediatricians, general practitioners, and otolaryngologists

Pichichero Michael E. Elmwood Pediatric Group, University of Rochester Medical Center, 601 Elmwood Avenue, Box 672, Rochester, NY 14642, USA. *Clinical pediatrics* (2005) Sep, Vol. 44, pp. 575–8, ISSN: 0009-9228.

The antibiotic preferences of 2,190 pediatricians (peds) 360 general practitioners (GPs), and 273 otolaryngologists (ENTs) in the United States and concurrence with treatment guideline

recommendations for acute otitis media (AOM) for suspected drug-resistant *Streptococcus pneumoniae* (DRSP) and beta-lactamase-producing *Haemophilus influenzae* before and after an educational workshop were compared. Peds and GPs preferred amoxicillin/clavulanate high-dose, whereas ENTs preferred higher generation cephalosporins. Before the workshop, endorsement of guideline-recommended antibiotics for treatment of AOM caused by DRSP by Peds, GPs, and ENTs was 80%, 75% and 78% respectively, and for *Haemophilus influenzae* was 73%, 63%, and 84%, respectively. After the workshop concurrence with AOM guideline recommendations for DRSP increased to 96%, 95%, and 97% and for *H. influenzae* increased to 93%, 94%, and 96% for Peds, GPs, and ENTs, respectively ($p < 0.0001$ for all comparisons). Peds, GPs, and ENTs select appropriate antibiotics for AOM 63–84% of the time. After instruction that provides the rationale for guideline-recommended agents based on pharmacokinetics/pharmacodynamics and double tympanocentesis trials, endorsement of recommended antibiotics significantly improved to >90%.

Pathogenesis of nasal polyps: an update

Pawliczak Rafal, Lewandowska Polak Anna, Kowalski Marek L. Department of Clinical Immunology and Allergy, Medical University of Lodz, 251 Pomorska Street, Building C5, Room 46, 92213 Lodz, Poland.

Current allergy and asthma reports (2005) Nov, Vol. 5, pp. 463–71, 78 refs, ISSN: 1529-7322.

The cause of nasal polyp formation is still unknown. Genetic predisposition has been suggested, but there are scanty data to support such theories. Activated epithelial cells may be the major source of mediators inducing influx of inflammatory cells (mostly eosinophils) and proliferation and activation of fibroblasts leading to nasal polyp formation. Infectious agents (including viruses, bacteria, or fungi) may be potential primary factors activating nasal epithelial cells. Proinflammatory cytokines and growth factors play important roles in the persistence of mucosal inflammation associated with nasal polyps. Arachidonic acid metabolites seem to be particularly important in the pathogenesis of nasal polyps in patients with aspirin hypersensitivity rhinosinusitis/asthma syndrome.

Primary carcinosarcoma of the helix of the ear

Vincek Vladimir, Mirzabeigi Marjan, Jewett Brian S, Goodwin W Jarrard.

Department of Pathology, University of Miami School of Medicine, FL, USA. vvincek@med.miami.edu.

Ear nose & throat journal (2005) Nov, Vol. 84, pp. 712–5, ISSN: 0145-5613.

We report our histologic and immunohistochemical findings in a rare case of cutaneous carcinosarcoma involving the helix of the ear. The tumor exhibited cellular features of both basal cell and squamous cell carcinoma and a malignant mesenchymal component that was consistent with malignant fibrous histiocytoma. The epithelial component exhibited a positive immunohistochemical reaction to cytokeratin and a negative reaction to vimentin, whereas the mesenchymal component showed a positive immunohistochemical reaction to vimentin and a negative reaction to cytokeratin. To the best of our knowledge, this is only the third reported case of a carcinosarcoma of the ear and the second case in which it developed on the helix.

Spontaneous retropharyngeal and cervical emphysema: a rare singer's injury

Shine Neville P, Lacy Peter, Conlon Brendan, McShane Donald. Department of Otolaryngology, South Infirmary-Victoria Hospital, Cork, Ireland. shinerl@eircom.net.

Ear nose & throat journal (2005) Nov, Vol. 84, pp. 726–7, ISSN: 0145-5613.

Spontaneous retropharyngeal and cervical emphysema is rare. We describe a case that was unusual in its etiology: the result of singing. Although this condition is usually benign, hospital admission for close observation and supportive therapy is prudent.