

Abstract Selection

Effect of superoxide dismutase and allopurinol on impulse noise-exposed guinea pigs—electrophysiological and biochemical study. Cassandro, E., Sequino, L., Mondola, P., Attanasio, G., Barbara, M., Filipo, R. Department of Experimental and Clinical Medicine, University of Reggio, Reggio, Italy. *Acta Oto-Laryngologica* (2003) September, Vol. 123 (7), pp. 802–7, ISSN: 0001-6489.

OBJECTIVE: To investigate the protective effect of two anti-reactive oxygen species (ROS) substances, copper-zinc superoxide dismutase (Cu Zn-SOD) and allopurinol, in impulse noise-exposed guinea pigs. **MATERIALS AND METHODS:** Allopurinol or CuZn-SOD were administered intraperitoneally before exposure to 125 dB SPL noise centred at 2.0–3.0 kHz, with a repetition rate of 4/s, for 1.8 h. Hearing thresholds were tested by means of electrocochleography after implanting the animals with permanent electrodes. The presence of lipoperoxides in the guinea pig cochleae exposed to noise-induced oxidative stress was determined by means of the dosage of malonaldehyde, evaluated by measuring the content of thiobarbituric acid reactive substances in perilymph samples. **RESULTS:** Acoustic stress induced ROS formation and both allopurinol and CuZn-SOD exerted a protective effect on the cochlea. Comparison of compound action potential thresholds in different animal groups showed that the temporary threshold shift was significantly lower in treated animals than in those without pharmacological protection. **CONCLUSION:** The protective effect of the antioxidant agents demonstrates that, even at a high level of impulse noise exposure, a metabolic mechanism of cochlear damage may still play an important role in noise-exposed sensorineural hearing loss.

Does the tonsillar surface flora differ in children with and without tonsillar disease? Van Staaij, B. K., Van Den Akker, E., H., De Haas Van Dorsser, E. H. M., Fler, A., Hoes Arno, W., Schilder Anne, G. M. Julius Center for Health Sciences and Primary Care, University Medical Center, Utrecht, The Netherlands. b.k.vanstaaij@med.uu.nl. *Acta Oto-Laryngologica* (2003) September, Vol. 123 (7), pp. 873–8, ISSN: 0001-6489.

OBJECTIVE: To investigate whether the tonsillar flora differ in children with and without adenotonsillar disease. **MATERIAL AND METHODS:** Tonsil surface swabs were taken from 218 children indicated for adenotonsillectomy because of moderate symptoms of recurrent tonsillopharyngitis or adenotonsillar hypertrophy (T+Ads group). Control swabs were taken from 100 children without symptoms or adenotonsillar disease who visited the ophthalmology clinic. Potential respiratory pathogens were identified. **RESULTS:** Potential respiratory pathogens were found in 54 per cent of the T+Ads group, compared to 41 per cent of the control group ($p = 0.04$). *Haemophilus influenzae* was the commonest pathogen in both groups, being found in 41 per cent of the T+Ads group and 34 per cent of the control group. *Moraxella catarrhalis* was found more often in the T+Ads group compared to the control group: seven per cent vs 0 per cent ($p = 0.004$). *H. influenzae* was found in 32 per cent of the children with recurrent tonsillitis, compared to 48 per cent of the children with symptoms of tonsillar hypertrophy ($p = 0.03$). **CONCLUSIONS:** The prevalence of potential respiratory pathogens on the tonsillar surface of children with moderate symptoms of recurrent tonsillopharyngitis and/or tonsillar hypertrophy differs only slightly from that in children without symptoms of adenotonsillar disease. Variations in the microbial flora do not seem to play an essential role in the predisposition of these children to tonsillar disease.

Fourth branchial pouch sinus with recurrent deep cervical abscesses successfully treated with trichloroacetic acid cauterization. Stenquist, M., Juhlin, C., Astroem, G., Friberg, U. Department of Otolaryngology, Head & Neck Surgery, University Hospital, Uppsala, Sweden. *Acta Oto-Laryngologica* (2003), September, Vol. 123 (7), pp. 879–82, ISSN: 0001-6489.

A previously healthy 13-year-old girl presented with a left-sided deep cervical abscess. A CT scan demonstrated an abscess in the lower neck, anterior to the common carotid artery. Treatment with i.v. antibiotics and incision drainage resolved the condition. A recurrence of the abscess seven months later was treated identically. Further investigations with MRI showed a 2–3 mm wide, 10 mm long structure in the lateral aspect of the left thyroid lobe. A barium radiograph depicted a narrow, 20 mm long fistula originating from the left pharynx. At endoscopy a 2–3 mm wide opening was found at the left pyriform sinus apex. This, together with the radiological findings, verified the diagnosis of a fourth branchial pouch sinus. The recurrence of the abscess may have been due to contamination by infectious pharyngeal secretions. Although radical surgical excision is traditionally recommended for this condition a non-invasive treatment, namely chemocauterization with 40 per cent trichloroacetic acid (TCA), was chosen in this case. Three cauterizations were needed to close the pyriform sinus opening. To date (month 14) there has been no recurrence of the cervical abscesses. TCA chemocauterization seems to be a safe first-line treatment for patients with a pyriform sinus fistula.

Baby swimming increases the risk of recurrent respiratory tract infections and otitis media. Nystad, W., Njaa, F., Magnus, P., Nafstad, P. Division of Epidemiology, Norwegian Institute of Public Health, Oslo, Norway. wenche.nystad@fhi.no. *Acta Paediatrica* (2003), August, Vol. 92 (8), pp. 905–9, ISSN: 0803-5253.

AIM: To estimate the association between baby swimming and recurrent respiratory tract infections and otitis media in the first year of life in children of parents without and with atopy. **METHODS:** Norwegian schoolchildren ($n = 2862$) were enrolled in a cross-sectional study of asthma and allergy using the questionnaire of the International Study of Asthma and Allergies in Childhood (ISAAC). The outcomes were parental retrospective report of recurrent respiratory tract infections and otitis media diagnosed by a physician in the first year of life. The exposure was baby swimming during the same period. Parental atopy reflects a history of maternal or paternal asthma, hayfever or eczema. **RESULTS:** The prevalence of recurrent respiratory tract infections was higher (12.3 per cent) among children who took part in baby swimming than among those who did not (7.5 per cent). The prevalence of recurrent respiratory tract infections during the first year of life was 5.6 per cent and 10.5 per cent, respectively, in children of parents without and with atopy, whereas the prevalence of baby swimming was 5.6 per cent and 5.1 per cent, respectively, in the two groups. Stratified analysis using parental atopy as strata showed that the increased risk of recurrent respiratory tract infections was only present among children of parents with atopy (adjusted odds ratio (aOR) 2.08, 95 per cent confidence interval (95 per cent CI) 1.08–4.031. A similar trend was present for otitis media (aOR 1.77, 95 per cent CI 0.96–3.25). **CONCLUSION:** The results of this study suggest that baby swimming and infant respiratory health may be linked. The findings need to be examined in a longitudinal study.

Development of the pharyngeal arches. Graham, A. MRC Centre for Developmental Neurobiology, Kings College London, London, United Kingdom, anthony.graham@kcl.ac.uk. *American Journal of Medical Genetics* (2003), June 15, Vol. 119A (3), pp. 251–6, Refs: 43, ISSN: 0148-7299.

The oropharyngeal apparatus has its origin in a series of bulges that are found on the lateral surface of the embryonic head, the pharyngeal arches. The development of the pharyngeal arches is complex involving a number of disparate embryonic cell types: ectoderm, endoderm, neural crest and mesoderm, whose development must be co-ordinated to generate the functional adult apparatus. In the past, most studies have emphasized the role played by the neural crest, which generates the skeletal elements

of the arches, in directing pharyngeal arch development, but it has also become apparent that the other tissues of the arches, most notably the endoderm, also play a prominent role in directing arch development. Thus pharyngeal arch development is more complex, and more consensual, than was previously believed. Copyright 2003 Wiley-Liss, Inc.

Recurrent advanced (T3 or T4) head and neck squamous cell carcinoma: is salvage possible? Gleich, L. L., Ryzenman, J., Gluckman, J. L., Wilson, K. M., Barrett, W. L., Redmond, K. P. Department of Otolaryngology–Head and Neck Surgery, University of Cincinnati, Cincinnati, Ohio, USA. lyon.gleich@uc.edu. *Archives of Otolaryngology–Head & Neck Surgery* (2004), January, Vol. 130 (1), pp. 35–8, ISSN: 0886-4470.

BACKGROUND: Salvage surgery is often the only curative option for recurrent cancer. In patients whose initial tumor is stage T₃ or T₄, the primary therapy often makes salvage even more difficult. We therefore analyzed the outcome in patients who were originally treated for T₃ or T₄ squamous cell carcinoma of the oral cavity, larynx, oropharynx, or hypopharynx and who then had a recurrence and chose to undergo further therapy for cure. **PATIENTS AND METHODS:** From 1980 to 2000, a total of 940 patients were treated for stage T₃ or T₄ cancer. Forty-eight patients underwent salvage therapy for recurrence: 24 for primary site recurrence, 20 for regional recurrence, and four for locoregional recurrence. **RESULTS:** The mean time to recurrence was 14.0 months, and the mean survival time was 26.2 months. Among the 28 patients treated for primary site recurrence, the mean time to rerecurrence was 12.6 months, and the mean survival time was 27.3 months. Only five of the 28 patients had prolonged survival. The stage of the recurrent disease did not influence outcome. Among the 20 patients treated for neck recurrence, the mean time to recurrence was 14.0 months, and the mean survival time was 25.0 months. Six of the 20 patients had prolonged survival, but none had a recurrence in a previously dissected and irradiated neck. **CONCLUSIONS:** These results show the limited potential for survival in patients who have a recurrence after treatment for advanced primary site head and neck cancer. Patients who have not undergone all modalities of therapy have the potential for salvage, but even then the chances are limited. Given the morbidity of salvage therapy, and the limited chance for cure, physicians must cautiously counsel patients who are contemplating treatment of recurrent cancer after therapy for advanced disease.

Identification of patients with head and neck cancer using serum protein profiles. Wadsworth, J. T., Somers, K. D., Stack, B. C. Jr., Cazares, L., Malik, G., Adam, B. L., Wright, G. L. Jr., Semmes, O. J. Department of Otolaryngology–Head & Neck Surgery, Eastern Virginia Medical School, Norfolk 23507, USA. wadswojt@evms.edu. *Archives of Otolaryngology–Head & Neck Surgery* (2004), January, Vol. 130 (1), pp. 98–104, ISSN: 0886-4480.

BACKGROUND: New and more consistent biomarkers of head and neck squamous cell carcinoma (HNSCC) are needed to improve early detection of disease and to monitor successful patient management. **OBJECTIVE:** To determine if a new proteomic technology can correctly identify protein expression profiles for cancer in patient serum samples as well as detect the presence of a known tumour marker. **DESIGN:** Direct proteomic analysis and comparison. **METHODS:** The surface-enhanced laser desorption/ionization time of flight mass spectrometry (SELDI-TOF) ProteinChip system was used to screen for differentially expressed proteins in serum samples from 99 patients with HNSCC, 25 'healthy' smokers, and 102 healthy (normal) controls. Protein peak clustering and classification analyses of the SELDI spectral data were performed. **RESULTS:** Several proteins, with masses ranging from 2778 to 20,800 Da, were differentially expressed between patients with HNSCC and the normal controls. The serum protein expression profiles were used to develop a classification tree algorithm, which achieved a sensitivity of 83.3 per cent and a specificity of 90 per cent in the discriminating HNSCC from normal and healthy smoker controls. The positive and negative predictive values were 80 per cent and 92 per cent respectively. A peak with an average mass of 10,068 Da was detected in sera from HNSCC patients and identified as the known biomarker metalloproteinase-1 (MPS-1), based on mass. Peak relative intensity of the 10,068-Da protein correlated consistently with MPS-1 levels detected by radioimmunoassay in serum samples

of HNSCC patients and controls. The 10,068-Da peak was provisionally identified as MPS-1 by SELFI immunoassay. **CONCLUSION:** We propose that this technique may allow for the development of a reliable screening test for the early detection and diagnosis of HNSCC, as well as the potential identification of tumour biomarkers. Grant ID: CA85067, Acronym: CA, Agency: NCI.

An innervated retroauricular skin flap for total earlobule reconstruction. Cordova, A., D-Arpa, S., Moschella, F. University of Palermo, Plastic and Reconstructive Surgery, Via del Vespro 129, 90127 C. da Bagliuso, Terrasini PA 90049, Italy. adriana.cordova@excite.com. *British Journal of Plastic Surgery* (2003), December, Vol. 56 (8), pp. 818–21, ISSN: 0007-1226.

In this article, the authors describe a technique for total earlobule reconstruction in a patient who underwent earlobule excision for basal cell carcinoma. The reconstruction was by means of an innervated retroauricular skin flap, folded double. The flap presented preserved skin sensitivity over all the reconstructed area, which is compromised by those techniques using a cranially or medially based flap which lead to the reconstruction of an insensible earlobule. This is a very important aspect of this technique, especially for those who wear pendant earrings, since a non-sensitive lobule would be more vulnerable to traumas causing laceration. In addition, it allows a good aesthetic result without evident donor site scars. Further investigation is needed to decide if this method is suitable for other types of total earlobule loss (e.g. congenital, traumatic), or not.

The nose and sleep-disordered breathing: what we know and what we do not know. Rappai, M., Collop, N., Kemp, S., DeShazo, R. Division of Pulmonary/Critical Care Medicine, University of Mississippi Medical Center, Jackson, MS, USA. *Chest* (2003), December, Vol. 124 (6), pp. 2309–23, Refs: 106, ISSN: 0012-3692. The relationship between sleep-disordered breathing (SDB) and nasal obstruction is unclear. In order to better understand, we performed an extensive computer-assisted review and analysis of the medical literature on this topic. Data were grouped into reports of normal control subjects, patients with isolated nasal obstruction, and those with SDB. We conclude that SDB can both result from and be worsened by nasal obstruction. Nasal breathing increases ventilatory drive and nasal occlusion decreases pharyngeal patency in normal subjects. Nasal congestion from any cause predisposes to SDB. Although increased nasal resistance does not always correlate with symptoms of congestion, nasal congestion typically results in a switch to oronasal breathing that compromises the airway. Moreover, oral breathing in children may lead to the development of facial structural abnormalities associated with SDB. We postulate that the switch to oronasal breathing that occurs with chronic nasal conditions is a final common pathway for SDB.

Vocal fold deposits in autoimmune disease—an unusual cause of hoarseness. Ylitalo, R., Heimbueger, M., Lindstad, P.A. Department of Logopedics and Phoniatrics, Karolinska Institute, Huddinge University Hospital, Stockholm, Sweden. ritta.h.ylitalo@klinvet.ki.se. *Clinical Otolaryngology and Allied Sciences* (2003), October, Vol. 28 (5), p. 446–50, ISSN: 0307-7772. The objective of this study was to evaluate the symptoms and clinical characteristics in patients with autoimmune vocal fold deposits. Fourteen patients underwent videolaryngostroboscopic examination and voice recording. Eleven of the 14 patients underwent rheumatological examination. In all cases, endoscopic examination showed transverse white-yellow band lesions in the middle of the membranous portion of the vocal folds. In most cases, the lesions were bilateral but not exactly opposing each other. The most common voice characteristics were instability and intermittent aphonia. Inflammatory diseases was present in 10 patients; five of these had rheumatoid arthritis (RA). No immunological signs common for all patients could be found. The histological examination was consistent with rheumatoid nodules. Vocal fold deposits, occurring most often in patients with RA, is an uncommon cause of hoarseness. Because the patients may have hoarseness as their primary symptom, it is important for otolaryngologists to be familiar with this disorder.

Nonsyndromic hearing loss. Van-Laer, L., Cryns, K., Smith, R. J. H., Van-Camp, G. Department of Medical Genetics, University of Antwerp, Belgium. *Ear and Hearing* (2003), August, Vol. 24 (4), pp. 275–88, Refs: 117, ISSN: 0196-0202.

The past decade has seen extremely rapid progress in the field of hereditary hearing loss. To date, 80 loci for nonsyndromic hearing loss have been mapped to the human genome. Furthermore, 30 genes have been identified. These genes belong to a wide variety of protein classes: from myosins and other cytoskeletal proteins, over channel and gap junction components, to transcription factors, extracellular matrix proteins and genes with an unknown function. The identification of these genes has enabled geneticists to offer DNA diagnostic tests for some types of nonsyndromic hearing loss. Moreover, it holds the promise to significantly improve the molecular knowledge on the auditory and vestibular organs and on the pathological mechanisms leading to hearing loss. This opens perspectives for future therapeutic and/or preventive measures for hearing loss. This review attempts to give an overview of the current knowledge of the genes responsible for nonsyndromic hearing loss, their expression and functions in the cochlea.

Conservative management of otitis media in cleft palate. Shaw, R., Richardson, D., McMahon, S. Maxillofacial Unit, University Hospital Aintree, Liverpool, UK. richardjohnshaw@hotmail.com. *Journal of Cranio-Maxillo-Facial Surgery* (2003), October, Vol. 31 (5), pp. 316–20, ISSN: 1010-5182

AIMS: Eustachian tube dysfunction affects nearly all children with cleft palate but its management is controversial. Some units perform routine prophylactic grommet insertion at the time of palate repair, whilst others are more conservative, inserting grommets only when signs and symptoms of otitis media with effusion are present. This study aims to present outcome data from one cleft team practising a conservative approach. **DESIGN:** This is a retrospective study in which consecutive palate repairs over 10 years are analysed and compared with previously published data. The spectrum of clefting and severity (LAHSHAL), otological and speech outcomes were recorded. Patients were excluded if incomplete data was available, and if sensorineural deafness or syndromic clefting was present. **RESULTS:** Data are presented for 72 of 109 consecutive patients and the 37 excluded patients are discussed. Following a conservative approach to otitis media with effusion, 29 per cent of cases required grommets. The use of grommets seemed to be more common in those with more severe clefting. Despite this, the group receiving grommets had better speech results than those who did not, although this improvement was not statistically significant. **CONCLUSIONS:** There is no evidence of poor overall otological outcome in this series. The data demonstrates that those receiving grommets had better results despite more severe clefting.

Auditory disturbance as a prodrome of anterior inferior cerebellar artery infarction. Lee, H., Cho, Y. W. Department of Neurology, School of Medicine and Institute for Medical Science, Keimyung University School of Medicine, Daegu, South Korea. hlee@dsmc.or.kr. *Journal of Neurology, Neurosurgery and Psychiatry* (2003), December, Vol. 74 (12), pp. 1644–8, ISSN: 0022-3050.

OBJECTIVES: To investigate the clinical and radiological features of patients presenting with an acute auditory syndrome as a prodromal symptom of anterior inferior cerebellar artery (AICA) infarction. **METHODS:** 16 consecutive cases of AICA infarction diagnosed by brain magnetic resonance imaging completed a standardized audiovestibular questionnaire and underwent a neuro-otological evaluation by an experienced neuro-otologist. **RESULTS:** Five patients (31 per cent) had an acute auditory syndrome as a prodrome of AICA infarction one to 10 days before onset of other brain stem or cerebellar symptoms. Two types of acute auditory syndrome were found: recurrent transient hearing loss with or without tinnitus ($n = 3$), and a single episode of prolonged hearing loss with or without tinnitus ($n = 2$). The episodic symptoms were brief, lasting only minutes. The tinnitus preceding the infarction was identical to the tinnitus experienced at the time of infarction. At the time of infarction, all patients developed hearing loss, tinnitus, vertigo, and ipsilateral hemiataxia. The most commonly affected site was the middle cerebellar peduncle ($n = 5$). Four of the five patients had incomplete hearing loss and all had absence of vestibular function to caloric stimulation on the affected side. **CONCLUSIONS:**

Acute auditory syndrome may be a warning sign of impending pontocerebellar infarction in the distribution of the AICA. The acute auditory syndrome preceding an AICA infarct may result from ischaemia of the inner ear or the vestibulocochlear nerve.

Analysis of taste disturbance before and after surgery in patients with vestibular schwannoma. Watanabe, K., Saito, N., Taniguchi, M., Kirino, T., Sasaki, T. Department of Neurosurgery, Faculty of Medicine, Gunma University, Maebashi, Japan. katsuwatanabe-nsu@umin.ac.jp. *Journal of Neurosurgery* (2003) December, Vol. 99 (6), pp. 999–1003, ISSN: 0022-3085.

OBJECT: The frequency, nature, and history of subjective taste disturbance before and after vestibular schwannoma (VS) surgery was investigated. **METHODS:** Personal interviews were conducted in 108 patients with unilateral VS. Abnormalities in taste perception, either a significant reduction or a change in character, were experienced by 31 patients (28.7 per cent) before surgery and by 37 (34.3 per cent) after tumour removal. Pre-operative taste disturbance worsened after surgery in five (16.1 per cent) of the 31 patients, remained unchanged in eight (25.8 per cent), improved in two (6.5 per cent), and became normal in 16 (51.6 per cent). Taste disturbance occurred post-operatively in 22 (28.6 per cent) of 77 patients who had experienced no pre-operative taste disturbance. The mean onset of the abnormality after resection was 1.1 \pm 1.7 months. Post-operative taste disturbance resolved in 24 of the 37 patients (64.9 per cent) within one year after onset. **CONCLUSIONS:** Subjective taste disturbance was common before and after VS removal, and the natural history of this condition was very variable in the pre- and post-operative periods. All patients who undergo surgery for VS should receive appropriate counselling about the likelihood and course of post-operative complications, including dysfunction of the sensory component of the facial nerve.

The multichannel auditory brainstem implant: how many electrodes make sense. Kuchta, J., Ott, S. R., Shannon, R. V., Hitselberger, W. E., Brackmann, D. E. Department of Neurosurgery, Cologne University, Cologne, Germany. phonosphere@web.de. *Journal of Neurosurgery* (2004), January, Vol. 100 (1), pp. 16–23, ISSN: 0022-3085.

OBJECT: Development of multichannel auditory brainstem implant (ABI) systems has been based in part on the assumption that audiological outcome can be optimized by increasing the number of available electrodes. In this paper the authors critically analyze this assumption on the basis of a retrospective clinical study performed using the Nucleus 22 ABI surface electrode array. **METHODS:** The perceptual performances of 61 patients with neurofibromatosis Type 2 were tested approximately six weeks after an eight-electrode ABI had been implanted. Of eight implanted electrodes 5.57 \pm 2.57 (mean \pm standard deviation (SD)) provided auditory sensations when stimulated. Electrodes were deactivated when stimulation resulted in significant non-auditory side effects or no auditory sensation at all, and also when they failed to provide distinctive pitch sensations. The mean (\pm SD) scores for patients with ABIs were the following: sound-only consonant recognition, 20.4 \pm 14.3 (range 0–65 per cent); vowel recognition, 28.8 \pm 18 per cent (range 0–67 per cent); Monosyllable Trochee Spondee (MTS) word recognition 41.1 \pm 25.3 per cent (range 0–100 per cent); and sentence recognition, 5.3 \pm 11.4 per cent (range 0–64 per cent). Performance in patients in whom between one and three electrodes provided auditory sensation was significantly poorer than that in patients with between four and eight functional electrodes in the vowel, MTS word, and City University of New York (CUNY) sentence recognition tests. The correlation between performance and electrode number did not reach the 0.05 level of significance with respect to the sound effect, consonant, and MTS stress-pattern recognition tests, probably because a satisfactory performance in these tests can be obtained only with temporal cues, that is, without any information about the frequency of the sounds. In the MTS word and the CUNY sentence recognition test, performance was optimal in the patients with eight functional electrodes. Although all top performers had more than three functional auditory electrodes, no further improvement (asymptomatic performance) was seen in those with five or more active electrodes in the consonant, vowel, and sound effect recognition tests. **CONCLUSIONS:** A minimum of three spectral channels, programmed in the appropriate individual tonotopic order seem to be required for satisfactory speech recognition in most patients with

ABI. Due to the limited access to the tonotopic frequency gradient of the cochlear nucleus with surface stimulation, patients with ABI do not receive a wide range of spectral cues (frequency information) with multielectrode (>5) surface arrays.

Endovascular treatment of a transverse-sigmoid sinus aneurysm presenting as pulsatile tinnitus. Case report. Zenteno, M., Murillo, B. L., Martinez, S., Arauz, A., Pane, C., Lee, A., del-Valle, R. Department of Neuroradiology and Endovascular Therapy, Instituto Nacional de Neurologia y Neurocirugia Manuel Velasco Suarez, Tlalpan, Mexico. luismur@avantel.net. *Journal of Neurosurgery* (2004), January, Vol. 100 (10), pp. 120–2, ISSN: 0022-3085. The authors report on the case of a 38-year-old woman who had experienced incapacitating pulsatile tinnitus in the left ear for six months. Angiographic studies revealed a wide-necked venous aneurysm of the left transverse-sigmoid sinus. Solitary stent placement across the aneurysm neck resulted in a slight modification in the lesion's characteristics. A second session, in which embolization with Guglielmi detachable coils was performed, resulted in a 100 per cent occlusion of the aneurysm, with patency of the parent vessel and resolution of the tinnitus.

Superior semicircular canal dehiscence: a new indication for middle fossa craniotomy. Case report. Martin, J. E., Neal, C. J., Monacci, W. T., Eisenman, D. J. National Capital Consortium Neurosurgery, Walter Reed Army Medical Center, Washington, DC, USA. jonathan.martin@na.amedd.army.mil. *Journal of Neurosurgery* (2004), January, Vol. 100 (1), pp. 125–7, ISSN: 0022-3085.

Superior semicircular canal dehiscence is a recently described condition resulting in pressure-induced vertigo in affected patients.

The diagnosis is established with the appearance of characteristic electronystagmographic and neuroimaging findings. This condition is amenable to surgical treatment by resurfacing of the dehiscence in the defect in the middle cranial fossa floor with preservation of superior semicircular canal function. The authors report on the treatment of a 35-year-old man with superior semicircular canal dehiscence by a joint neurosurgical and otolaryngological team.

Novel closure technique for the endonasal transsphenoidal approach. Technical note. Liu, J. K., Orlandi, R. R., Apfelbaum, R. I., Couldwell, W. T. Department of Neurosurgery, Division of Otolaryngology–Head and Neck Surgery, University of Utah School of Medicine, Salt Lake City, Utah 84132, USA. *Journal of Neurosurgery* (2004), January, Vol. 100 (1), pp. 161–4, ISSN: 0022-3085.

Transsphenoidal microsurgery has been the standard approach to sellar lesions since the repopularization of the technique with modifications by Dott, Guiot, and Hardy. The endonasal transseptal transsphenoidal approach, as introduced by Hirsch, is still commonly used by pituitary surgeons to remove lesions of the sellar and parasellar region. One disadvantage of this approach is that the submucosal dissection requires post-operative nasal packing, which is a source of discomfort in patients who undergo transsphenoidal surgery. The authors describe a novel closure technique for the unilateral endonasal transsphenoidal approach that eliminates the need for full nasal packing, minimizing post-operative rhinological morbidity. This technique has been performed in 67 patients harbouring sellar and parasellar lesions. All patients recovered rapidly without significant rhinological sequelae.