The Journal of Laryngology and Otology
January 1989. Vol. **103.** pp. 121–123

Abstract selection

From this month, a selection of abstracts will appear in each issue, as an additional service to subscribers/readers. We are greatly indebted to the following journals, their parent organizations and publishers for allowing us to publish these abstracts which are reproduced verbatim.

ALLERGY—*Munksgaard International Publishers Ltd.*
ALLERGY PROCEEDINGS (*New England and Regional Allergy Proceedings*)—*Official Journal of Regional and State Allergy Societies*
ANAESTHESIA (*Journal of the Association of Anaesthetists of Great Britain and Ireland*)
ANESTHESIA AND ANALGESIA (*International Anesthesia Research Society*)—*Elsevier Science Publishing Co. Inc.*
ANESTHESIOLOGY—*J. B. Lippincott Co.*
ARCHIVES OF OPHTHALMOLOGY (*American Medical Association*)
AUDIOLOGY (*Journal of Auditory Communication—Official Organ of the International Society of Audiology*)—*S. Karger*
AVIATION, SPACE AND ENVIRONMENTAL MEDICINE (*Aerospace Medical Association*)

BRAIN RESEARCH—*Elsevier Science Publications*
BRITISH JOURNAL OF CANCER (*Cancer Research Campaign*)
BRITISH JOURNAL OF ORAL AND MAXILLOFACIAL SURGERY—*Churchill Livingstone Medical Journals*
BRITISH JOURNAL OF PLASTIC SURGERY (*British Association of Plastic Surgeons*)—*Churchill Livingstone Medical Journals*
BRITISH JOURNAL OF RADIOLOGY (*British Institute of Radiology*)
BRITISH JOURNAL OF SURGERY—*Butterworth Scientific Limited*

CANCER—*J. B. Lippincott Co.*
CANCER TREATMENT REVIEWS—*Academic Press Inc. (London) Ltd.*
CHEST (*American College of Chest Physicians*)
CLEFT PALATE JOURNAL (*American Cleft Palate Association*)
CLINICAL ALLERGY AND IMMUNOLOGY—*Blackwell Scientific Publications Ltd.*
CLINICAL GENETICS—*Munksgaard International Publishers Ltd.*
CLINICAL NUCLEAR MEDICINE—*J. B. Lippincott Co.*
CLINICS IN PLASTIC SURGERY—*W. B. Saunders Co.*

EAR AND HEARING (*American Auditory Society*)—*Williams and Wilkins*
EUROPEAN JOURNAL OF SURGICAL ONCOLOGY—*Academic Press Inc. (London) Ltd.*

INDIAN JOURNAL OF LEPROSY (*Quarterly Scientific Journal of the Hinde Kusht Nivaran Sangh*)
INDIAN JOURNAL OF PATHOLOGY AND MICROBIOLOGY (*Indian Association of Pathologists and Microbiologists*)
INTERNATIONAL JOURNAL OF PEDIATRIC OTO-RHINOLARYNGOLOGY—*Elsevier Science Publishers*

JAPANESE JOURNAL OF CLINICAL ONCOLOGY (*Foundation of Clinical Oncology—National Cancer Centre*)
JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA (*American Institute of Physics*)
JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY (*American Academy of Allergy and Immunology*)—*C. V. Mosby Co.*
JOURNAL OF BIOMEDICAL ENGINEERING (*Biology Engineering Society*)—*Butterworth Scientific Ltd.*
JOURNAL OF ENDOCRINOLOGICAL INVESTIGATION (*Italian Society of Endocrinology*)—*Editrice Kurtis*
JOURNAL OF INFECTIOUS DISEASES (*Infectious Diseases Society of America*)—*University of Chicago Press*
JOURNAL OF MEDICAL ENGINEERING AND TECHNOLOGY—*Taylor and Francis Ltd.*
JOURNAL OF RADIOLOGY/JOURNALE DE NEURORADIOLOGIE (*Societie de Publication de Periodique Internationaux a Francais*)
JOURNAL OF NEUROSURGERY (*American Association of Neurological Surgeons*)
JOURNAL OF PEDIATRICS—*C. V. Mosby Co.*
JOURNAL OF PROSTHETIC DENTISTRY—*C. V. Mosby Co.*
JOURNAL OF SPEECH AND HEARING RESEARCH (*American Speech—Language—Hearing Association*)

NEUROSURGERY (*Journal of the Congress of Neurological Sciences*)—*Williams and Wilkins*
NEW YORK STATE JOURNAL OF MEDICINE (*Medical Society of the State of New York*)

ORAL SURGERY, ORAL MEDICINE, ORAL PATHOLOGY—*C. V. Mosby Co.*

PEDIATRICS (*American Academy of Pediatrics*)
PEDIATRIC INFECTIOUS DISEASES—*Williams and Wilkins*
POSTGRADUATE MEDICAL JOURNAL (*Fellowship of Postgraduate Medicine*)—*Macmillan Press Ltd.*
PUBLIC HEALTH REPORTS (*Official Journal of the U.S. Public Health Services*)

RADIOGRAPHICS (*Radiological Society of North America*)
RADIOLOGY (*Radiological Society of North America*)
RETINA (*Journal of Retinal and Vitreous Diseases*)—*J. B. Lippincott Co.*
REVIEWS OF INFECTIOUS DISEASES (*Infectious Diseases Society of America*)—*University of Chicago Press*

SCANDINAVIAN AUDIOLOGY (*Scandinavian Audiological Society*)—*Almqvist and Wiksell International*
SOUTH AFRICAN MEDICAL JOURNAL (*Medical Association of South Africa*)
SOUTH AFRICAN JOURNAL OF COMMUNICATIVE DISORDERS (*South African Speech and Hearing Association*)
SOUTHERN MEDICAL JOURNAL (*Southern Medical Association*)

WEST INDIAN MEDICAL JOURNAL (*University of the West Indies*)

The following journals have been *excluded* as it is anticipated that subscribers/readers will already have access to them and will consult/read them regulary.
ACTA OTO-LARYNGOLOGICA BELGICA
ACTA OTO-LARYNGOLOGICA (*Stockholm*)
ADVANCES IN OTO-RHINO-LARYNGOLOGY
AMERICAN JOURNAL OF OTOLOGY
AMERICAN JOURNAL OF OTOLARYNGOLOGY
ANNALES D'OTO-LARYNGOLOGIE
ANNALS OF OTOLOGY, RHINOLOGY AND LARYNGOLOGY
ARCHIVES OF OTOLARYNGOLOGY—*Head and Neck Surgery*
ARCHIVES OF OTORHINOLARYNGOLOGY
AURIS, NASUS, LARYNX
BRITISH JOURNAL OF AUDIOLOGY
CLINICAL OTOLARYNGOLOGY
EAR, NOSE AND THROAT JOURNAL
H.N.O.
IL VALSALVA
INDIAN JOURNAL OF OTOLARYNGOLOGY

JOURNAL OF OTOLARYNGOLOGY
LARYNGOLOGIE, RHINOLOGIE, OTOLOGIE
LARYNGOSCOPE
OTOLARYNGOLOGY—*Head and Neck Surgery*
OTOLARYNGOLOGIC CLINICS OF NORTH AMERICA
ORL—*Journal of Oto-Rhino-Laryngology and its related Specialities*
PAKISTAN JOURNAL OF OTOLARYNGOLOGY
REVUE DE LARYNGOLOGIE, OTOLOGIE ET RHINOLOGIE
RHINOLOGY
VESTNIK OTORINOLARYNGOLOGII

ANNALS OF ROYAL COLLEGE OF SURGEONS OF ENGLAND
BRITISH JOURNAL OF HOSPITAL MEDICINE
BRITISH MEDICAL JOURNAL
JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION (JAMA)
JOURNAL OF ROYAL COLLEGE OF SURGEONS OF EDINBURGH
JOURNAL OF THE ROYAL SOCIETY OF MEDICINE
LANCET
NEW ENGLAND JOURNAL OF MEDICINE

Effect of topical levocabastine on allergic and non-allergic perennial rhinitis. A double-blind study, levocabastine vs. placebo, followed by an open, prospective, single-blind study on beclomethasone. van de Heyning, P. H., van Haesendonck, J., Creten, W. and Rombaut, N. Department of E.N.T., University of Antwerp, Belgium. *Allergy* (1988) July, Vol. 43 (5), pp. 386–391.
Forty-four patients, with symptoms of nasal obstruction, sneezing, itching and/or rhinorrhea, were entered into a placebo-controlled, double-blind study to evaluate the clinical efficacy of a topical antihistamine drug, levocabastine, applied four times a day for 14 days. At the end of the treatment the placebo patients were treated with levocabastine and the levocabastine patients were treated with beclomethasone dipropionate in a single-blind design for another 14 days. This study showed that levocabastine is significantly more active than placebo with reference to nasal discharge and sneezing. Placebo application improved the symptom score. Levocabastine could not be proved to be more effective against nasal obstruction than placebo in the double-blind trial. In the single-blind set-up, levocabastine resulted in an additional improvement in the score for obstruction, after the placebo period. Although the allergic group tended to respond better, no statistically significant difference could be detected between allergic and non-allergic patients. After treatment with levocabastine, beclomethasone dipropionate administration could not improve the results for nasal discharge and sneezing. For nasal congestion, beclomethasone dipropionate proved to be superior to levocabastine. Author.

The effects of thiopentone and propofol on upper airway integrity. McKeating, K., Bali, I. M. and Dundee, J. W. Department of Anaesthetics, Queen's University of Belfast, N. Ireland. *Anaesthesia* (1988) August, Vol. 43 (8), pp. 638–640.
One hundred and fifty-eight unpremedicated patients scheduled for elective surgery were allocated randomly to receive an unsupplemented induction dose of thiopentone or propofol. Visualization of the vocal cords by standard laryngoscopy was possible more often after propofol (p less than 0.01). Pharyngeal and laryngeal reactivity was similarly depressed more frequently. Author.

Treatment of hay fever by Allerglobuline: a randomized double-blind study. Girard, J. P., el Habib, G. and Granjard, P. Department of Medicine, Hoptial Cantonal Universitaire, Geneva, Switzerland. *Clinical Allergy and Immunology* (1988) July, Vol. 18 (4), pp. 393–400.
Eighty patients suffering from documented hay fever have been entered in a double-blind randomized study with the purpose of evaluating the efficacy of Allerglobuline, a 10 per cent human immunoglobulin preparation of placental origin, in the treatment of hay fever. The placebo was a 10 per cent human albumin solution. The treatment started six weeks before the customary onset time of the clinical symptoms. It included a course of ten preseasonal intramuscular injections, with one vial (5 ml.) given twice a week, and followed by a booster injection of one vial on 15 June and 30 June during the grass pollen season. As the two groups of patients were similar, it was possible to demonstrate a significant symptomatic relief of rhinitis and conjunctivitis in the treated group, compared with the control group (p less than 0.0001), and an improvement of the respiratory symptoms. Symptomatic improvement was already apparent at the onset of the pollen season and persisted during the following weeks. An appreciable reduction in the consumption of antihistamines could also be shown (p less than 0.0001). Furthermore, a lesser increase in the total IgE level and in the specific cereal and grass pollen RAST could be demonstrated. This treatment can be seriously considered for the management of severe pollen allergy, particularly in those cases that show a poor response to immunotherapy. Author.

Neuromagnetic responses from a deaf subject to stimuli presented through a multichannel cochlear prosthesis. Hari, R., Pelizzone, M., Makela, J. P., Hallstrom, J., Huttunen, J. and Knuutila, J. Low Temperature Laboratory, Helsinki University of Technology, Espoo, Finland. *Ear and Hearing* (1988) June, Vol. 9 (3), pp. 148–152.
Neuromagnetic responses to stimuli presented through a four-channel cochlear prosthesis were recorded from a deaf subject. The topography of the responses agreed with activation of the supratemporal auditory cortex. The responses to tone pips, noise/square-wave sequences, and to intermittent frequency modulation of a continuous tone resembled those obtained from subjects with normal hearing, being consistent with the good performance of this subject with his implant. Author.

Temporal integration in normal hearing, cochlear impairment, and impairment simulated by masking. Florentine, M., Fastl, H. and Buus, S. Communication Research Laboratory, Northeastern University, Boston, Massachusetts 02115. *Journal of the Acoustical Society of America* (1988) July, Vol. 84 (1), pp. 195–203.
To assess temporal integration in normal hearing, cochlear impairment, and impairment simulated by masking, absolute thresholds for tones were measured as a function of duration. Durations ranged from 500 ms. down to 15 ms. at 0.25 kHz., 8 ms. at 1 kHz., and 2 ms. at 4 and 14 kHz. An adaptive 2I, 2AFC procedure with feedback was used. On each trial, two 500-ms. observation intervals, marked by lights, were presented with an interstimulus interval of 250 ms. The monaural signal was presented in the temporal centre of one observation interval. These results for five normal and six impaired listeners show: (1) normal listeners' thresholds decrease by about 8 to 10 dBb. per decade of duration, as expected; (2) listeners with cochlear impairments generally show less temporal integration than normal listeners; and (3) listeners with impairments simulated using masking noise generally show the same amount of temporal integration as normal listeners tested in the quiet. The difference between real and simulated impairments indicates that the reduced temporal integration observed in impaired listeners probably is not due to splatter of energy to frequency regions where thresholds are low, but reflects reduced temporal integration *per se*. Author.

A cochlear model for acoustic emissions. Furst, M. and Lapid, M. Department of Electronic Systems, Faculty of Engineering, Tel Aviv University, Israel. *Journal of the Acoustical Society of America* (1988) July, Vol. 84 (1), pp. 222–229.
Variability in cochlear emission properties among different species, particularly humans and small mammals, and within individuals in the same species, is modelled by a cochlear nonlinear transmission line. The difference between humans and animals is largely explained by a lower cochlear input impedance in human ears than in cats, gerbils, or chinchillas. Inconstancy in emission properties among individual human or animal subjects is related to structural variability among ears, which can be the result of a nonuniform connection between the outer hair cells cilia and the tectorial membrane. These structural differences are modelled by a nonuniform cochlear partition resistance along the cochlear length. The model predicts that an ear which has a uniform cochlear partition resistance and an adequate cochlear input impedance will emit acoustic distortion products (ADP), but not spontaneous acoustic emission (SAE), nor click-evoked emission (CE). Only a nonuniform cochlea emits SAE and CE in addition to enhaced ADPs. The model predictions agree quantitatively with cochlear emissions data from humans and animals. Author.

The negative effect of amplitude compression in multichannel hearing aids in the light of the modulation-transfer function. Plomp, R. TNO Institute for Perception, Soesterberg, The Netherlands.

Journal of the Acoustical Society of America (1988) June, Vol. 83 (6), pp. 2322–2327.
The article deals with the question of why multichannel amplitude compression appears to have a negative rather than a positive effect on speech intelligibility by hearing-impaired listeners. It is argued that the small time constants of amplitude compression diminish the temporal as well as the spectral contrasts in the speech signal. According to the modulation-transfer function concept, this results in reduced intelligibility scores. Experimental evidence is reviewed indicating that the following two arguments in favour of amplitude compression in case of sensorineural hearing loss are not valid: (1) to compensate for the effects of loudness recruitment and (2) to get weak consonants above threshold. The author concludes that, in multichannel hearing aids, automatic gain control with time constants of 0.25–0.5 s. should be given preference to amplitude compression. Author.

Preliminary evaluation of a multichannel electrotactile speech processor. Cowan, R. S., Alcantara, J. I., Blamey, P. J. and Clark, G. M. Department of Otolaryngology, University of Melbourne, Royal Victorian Eye and Ear Hospital, Victoria, Australia. *Journal of the Acoustical Society of America* (1988) June, Vol. 83 (6), pp. 2328–2338.
Speech discrimination testing, using both open- and closed-set materials, was carried out with four severely to profoundly hearing impaired adults and seven normally hearing subjects to assess performance of a wearable eight-channel electrotactile aid (Tickle Talker). Significant increases in speechtracking rates were noted for all subjects when using the electrotactile aid. After 70 h. of training, mean tracking rate in the tactile plus lipreading condition was 55 words per minute (w.p.m.), as compared with 36 w.p.m. for lipreading alone, for the normally hearing group. For the hearing impaired group, the mean tracking rate in the aided condition was 37 w.p.m., as compared with 24 w.p.m. for lipreading alone, following 35 h. of training. Performance scores on Central Institute for the Deaf (CID) everyday sentences, Consonant Nucleus Consonant (CNC) words, and closed-set vowel and consonant identification were significantly improved when using the electrotactile aid. Performance scores, using the aid without lipreading, were well above chance on consonant and vowel identification and on elements of the Minimal Auditory Capabilities Battery. Two hearing impaired subjects have used the device satisfactorily in the home environment. Author.

Impact of recurrent otitis media on middle ear function, hearing, and language. Wright, P. F., Sell, S. H., McConnell, K. B., Sitton, A. B., Thompson, J., Vaughn, W. K. and Bess, F. H. Department of Pediatrics, Vanderbilt University, Nashville, TN 37232. *Journal of Pediatrics* (1988) September, Vol. 113 (3), pp. 581–587.
Whether recurrent otitis media in infants and young children is followed by delayed language development was addressed by following 210 normal subjects longitudinally through the first two years of life with pneumatic otoscopy and tympanometry performed at every physician encounter. Otitis accounted for 26 per cent of the medical visits. One hundred and fifty-six of these children had speech and hearing evaluation at 2 years of age. Thirty per cent of the children with recurrent otitis media had a mild or moderate hearing loss. However, after multiple speech and language tests, we could not identify a delay in language acquisition in the otitis-prone children. At 3 to 4 years old, 36 children, including nine with a hearing loss at 2 years of age, were retested; all nine had normal hearing. Recurrent otitis media induced a temporary decrease in hearing sensitivity demonstrable at 2 years of age, which appeared to resolve as the children matured and which was not associated with delay in language acquisition. Author.

Palinacousis: a case report. Patterson, M. C., Tomlinson, F. H. and Stuart, G. G. Department of Medicine, University of Queensland, Royal Brisbane Hospital, Australia. *Neurosurgery* (1988) June, Vol. 22 (6 Pt 1), pp. 1088–1090.
Palinacousis (auditory perseveration) is a rarely reported symptom of temporal lobe dysfunction. We describe a new case. A 50-year-old woman presented with nausea, vomiting, and global dysphasia, followed by two generalized seizures. Examination was otherwise normal, and computed tomography showed a small area of enhancement near the left Sylvian fissure; there was a left temporal focus on the electroencephalogram. Treatment with phenytoin was instituted, and speech improved, with residual fluent dysphasia. Three days postictally, the patient complained of 'echoing voices' in her right ear. Words or fragments of sentences recently uttered by the patient or others were perceived to recur unaltered for minutes to hours. Sounds other than speech were also affected. One week later the voices had disappeared, but a ticking sound was present; this also faded subsequently. The palinacousis never recurred; the patient was later found to have a Grade IV astrocytoma of the left temporal lobe, which caused her demise eight months later. The features of this case are similar to those previously reported and favour an epileptic aetiology. Palinacousis should be recognized as a sign of organic temporal lobe disease and not confused with manifestations of psychotic illness. Author.