

Abstract Selection

We are grateful to the following additional Journals, their editors, publishers and parent associations for allowing us to include abstracts. Without their co-operation, the service would not be possible and we are most grateful to them for their co-operation.

Annals of Allergy
Annals of the New York Academy of Sciences
British Journal of Disorders of Communication (College of Speech Therapists)
British Journal of Industrial Medicine (British Medical Association)
Gut (Journal of the British Society of Gastroenterology) (British Medical Association)
International Journal of Clinical Pharmacology Research (Bio-science Ediprint Inc.)
Journal of Applied Physiology (American Physiological Society)
Journal of the Autonomic Nervous System (Elsevier Science Publishers)
Science (American Association for the Advancement of Science)
Ultrastructural Pathology (Hemisphere Publishing Corporation)

Chronic hoarseness secondary to gastroesophageal reflux disease: documentation with 24-h ambulatory pH monitoring. Wiener, G. J., Koufman, J. A., Wu, W. C., Cooper, J. B., Richter, J. E., Castell, D. O. Department of Medicine, Bowman Gray School of Medicine, Wake Forest University, Winston-Salem, North Carolina. *American Journal of Gastroenterology* (1989) Dec, Vol. 84 (12), pp. 1503–8.

Gastroesophageal reflux (GER) has been implicated in otolaryngologic problems, particularly chronic hoarseness that cannot be attributed to other causes. To study this relationship, we used 24-h ambulatory intraesophageal or dual pharyngoesophageal pH monitoring in 33 patients with chronic hoarseness and laryngeal lesions suggestive of acid irritation. Twenty-six of the patients (78.8 per cent) had pH evidence of severe GER, being at least three times greater than the upper limit of normal. In contrast to 19 patients with proven esophagitis, this GER was worse in the upright position. Of 15 patients with both pharyngeal and esophageal probes, three had esophagopharyngeal reflux, and two had atypical unexplained pharyngeal decreases in pH to below 4.0. Less than half of the 33 patients had the typical symptoms of GER, and standard esophageal tests usually yielded normal findings. Occult GER, predominantly in the upright position, appears to be common and severe in patients with chronic hoarseness, who have laryngeal lesions suggestive of GER. The causative mechanisms are not clear. The 24-h esophageal pH monitor is useful in screening this potentially treatable problem. Author.

Follow-up of hearing thresholds among forge hammering workers. Kamal, A. A., Mikael, R. A., Faris, R. Department of Community, Environmental, and Occupational Medicine, Faculty of Medicine, Ain Shams University, Abbasia, Cairo, Egypt. *American Journal of Industrial Medicine* (1989), Vol. 16 (6), pp. 645–58.

Hearing threshold was reexamined in a group of forge hammering workers investigated eight years ago with consideration of the age effect and of auditory symptoms. Workers were exposed to impact noise that ranged from 112 to 139 dB(A)—at an irregular rate of 20 to 50 drop/minute—and a continuous background noise that ranged from 90 to 94 dB(A). Similar to what was observed eight years ago, the present permanent threshold shift (PTS) showed a maximum notch at the frequency of 6 kHz and considerable elevations at the frequencies of 0.25–1 kHz. The age-corrected PTS and the postexposure hearing threshold were significantly higher than the corresponding previous values at the frequencies 0.25, 0.5, 1, and 8 kHz only. The rise was more evident at the low than at the high frequencies. Temporary threshold shift (TTS) values were significantly less than those eight years ago. Contrary to the previous

TTS, the present TTS were higher at low than at high frequencies. Although progression of PTS at the frequencies 0.25 and 0.5 kHz was continuous throughout the observed durations of exposure, progression at higher frequencies occurred essentially in the first 10 to 15 years of exposure. Thereafter, it followed a much slower rate. Tinnitus was significantly associated with difficulty in hearing the human voice and with elevation of PTS at all the tested frequencies, while acoustic after-image was significantly associated with increment of PTS at the frequencies 0.25–2 kHz. No relation between PTS and smoking was found. PTS at low frequencies may provide an indication of progression of hearing damage when the sensitivity at 6 and 4 kHz diminishes after prolonged years of exposure. Tinnitus and acoustic after-image are related to the auditory effect of forge hammering noise. Author.

Intraosseous adenoid cystic carcinoma of the mandible. Johnson, P. A., Millar, B. G., Leopard, P. J. Department of Oral and Maxillofacial Surgery, North Staffs Hospital Centre, Stoke-on-Trent. *British Journal of Oral and Maxillofacial Surgery* (1989) Dec, Vol. 27 (6), pp. 501–5.

Radiolucent lesions in the jaws usually are associated with pathology of odontogenic origin. An unusual case of an adenoid cystic carcinoma arising from within the mandible is described. The origin of central salivary tumours is discussed and the literature reviewed. Author.

Neurilemmoma involving the maxillary sinus: a case report. Yusuf, H., Fajemisin, O. A., McWilliam, L. J. Department of Oral and Maxillofacial Surgery, Withington Hospital, West Didsbury, Manchester. *British Journal of Oral and Maxillofacial Surgery* (1989) Dec, Vol. 27 (6), pp. 506–11.

A case is reported of a neurilemmoma arising from the maxillary sinus. Its aetiology, presentation, histology and treatment are discussed. Author.

Prefrontal cortex gating of auditory transmission in humans. Knight, R. T., Scabini, D., Woods, D. L. Department of Neurology, University of California, Davis Veterans Administration Medical Center, Martinez 94553. *Brain Research* (1989) Dec 18, Vol. 504 (2), pp. 338–42.

Middle-latency auditory evoked potentials (MAEPs) were recorded in controls and patients with focal lesions in dorsolateral prefrontal cortex. Unilateral prefrontal lesions increased the amplitude of Pa component of the MAEP beginning at 25–35 ms poststimulus. The data suggest that prefrontal cortex exerts early inhibitory modulation of input to primary auditory cortex in humans. Author.

Treatment of stage I nasopharyngeal carcinoma: analysis of the patterns of relapse and the results of withholding elective neck irradiation. Lee, A. W., Sham, J. S., Poon, Y. F., Ho, J. H. Institute of Radiology and Oncology, Medical and Health Department, Queen Elizabeth Hospital, Kowloon, Hong Kong. *International Journal of Radiation Oncology, Biology and Physics* (1989) Dec, Vol. 17 (6), pp. 1183–90.

This is a retrospective analysis of 196 patients with nasopharyngeal carcinoma Stage I (Ho's classification) treated by megavoltage radiation during 1980–1984. The primary target volume included all potential sites of local invasion and the first station lymph nodes at retropharyngeal spaces. Two different dose schedules were used, both gave a total tumour dose biologically equivalent to 65 Gy by local-recurrence-free survival of 88 per cent. Elective neck irradiation was withheld in all except seven patients. The overall seven-year actuarial survival was 85 per cent, but the relapse-free survival was only 62 per cent. The patterns of relapse, prognostic factors, and treatment complications were analysed. Eighteen patients (nine per cent) recurred locally. Radical retreatment with radiation achieved complete remission in seven out of

fifteen cases. Distant failure occurred in 17 patients (nine per cent). Although 57 (30 per cent) of the 189 patients without elective neck irradiation subsequently showed lymph node involvement, none of the seven regionally-treated patients relapsed. The successful regional salvage rate was 81 per cent overall (46 out of 57 patients), but 90 per cent (44 of 49) for those properly treated with whole neck irradiation. However, the seven-year actuarial survival was lower in patients with nodal relapse than those without (70 per cent versus 87 per cent) because of the associated higher incidence of hematogenous dissemination. The various aspects of treatment, the value of elective neck irradiation in particular, are discussed. Author.

Apparent auditory deprivation effects of late onset: the role of presentation level. Gatehouse, S. MRC Institute of Hearing Research, Royal Infirmary, Glasgow, Scotland. *Journal of the Acoustical Society of America* (1989) Dec, Vol. 86 (6), pp. 2103-6. Silman and colleagues (*Journal of the Acoustical Society of America* 76, 1347-1362 (1984)) have reported an apparent effect of late auditory deprivation; this presents as loss of discrimination over time in the unaided ear of individuals using a single hearing aid fitted in middle age. In a replication of the basic effect, the influence of presentation level was examined in 24 monaurally aided subjects. The effect was reversed at presentation levels below about 75 dB SPL. The ear that is normally aided performs better at high presentation levels, while, at lower presentation levels, the converse is true. Thus it appears that a form of selective adjustment takes place in a particular part of the dynamic range, at least in ears with a dynamic range limited by a sensory hearing loss. If this interpretation is correct, there are important implications for research on perceptual learning and for the time course of evaluation in hearing aid provision. Author.

The recognition of vowels differing by a single format by cochlear-implant subjects. Tyler, R. S., Tye-Murray, N., Otto, S. R. Department of Otolaryngology-Head and Neck Surgery University of Iowa, Iowa City 52242. *Journal of the Acoustical Society of America* (1989) Dec, Vol. 86 (6), pp. 2107-12. The ability to recognize synthetic, two-formant vowels with equal duration and similar loudness was measured in five subjects with the Cochlear and five subjects with the Symbion cochlear implants. In one set of test stimuli, vowel pairs differed only in the first-formant frequency (F1). In another set, vowel pairs differed only in the second-formant frequency (F2). When F1 differed, four of five Cochlear subjects and four of five Symbion subjects recognized the vowels significantly above chance. When F2 differed, two of five Cochlear subjects and three of five Symbion subjects scored above chance. These results suggest that implanted subjects can utilize both 'place' information across different electrodes and 'rate' information on a single electrode to derive information about the spectral content of the stimulus. Author.

Hazard from an intense midrange impulse. Price, G. R., Wansack, S. U.S. Army Human Engineering Laboratory, Aberdeen Proving Ground, Maryland 21005-5001. *Journal of the Acoustical Society of America* (1989) Dec, Vol. 86 (6), pp. 2185-91. It has been hypothesized that the ear would become increasingly susceptible to impulses (gunfire) as the spectral peak of the impulse approached the frequency region where the ear was tuned best (about 4 kHz for the cat ear) (G. R. Price, *Journal of the Acoustical Society of America* Suppl. 1 62, S95 (1977)). This prediction was counter to the predictions of the world's damage-risk criteria for impulse noise. It has been supported by experiments using exposures to 100 Hz and 800 to 1000 Hz impulses; but no test had been run at the point of predicted maximum susceptibility. In the present experiment, three groups of cats were exposed to 50 impulses produced by a primer explosion (spectral peak at 4 kHz) at peak levels of 135, 140 or 145 dB. Auditory thresholds were electrophysiologically measured from the vertex to 2-, 4-, 8-, and 16 kHz tone pips and losses were determined 30 min after exposure and more than two months post-exposure. Losses were greatest at 4 kHz, began to develop at 134 dB peak pressure, and the immediate losses grew at a rate of about 7 dB for every dB increase in peak pressure. About half of the loss measured immediately became permanent. The energy required to begin producing a permanent threshold shift was only about 0.07 J/m², far lower than that required with continuous noises at lower sound pressures. The data were interpreted as supporting the original hypothesis of greater susceptibility in the midrange. Author.

Comments on 'Acoustic Transfer Characteristics in Human Middle Ears Studied by a SQUID Magnetometer Method' (Journal of the Acoustical Society of America 82, 1646-1654 (1987)). Goode, R. L., Nakamura, K., Gyo, K., Aritomo, H. Division of Otolaryngology, Stanford University Medical Center, California 94305. *Journal of the Acoustical Society of America* (1989) Dec, Vol. 86 (6), pp. 2446-9.

The study by Brenkman *et al.*, (*Journal of the Acoustical Society of America* 82, 1646-1654 (1987)) of malleus umbo and anterior crus of stapes displacement in 14 human temporal bones shows a mean -7.3-dB/oct slope above 1.0 kHz for stapes displacement in response to a 80 dB SPL input at the eardrum. The slope they obtained for midfrequency (1.0-4.0 kHz) stapes displacement is significantly flatter than what was found previously (Gyo *et al.*, *Acta Otolaryngol.* 103, 87-95 (1987); Gundersen, Prostheses in the Ossicular Chain (University Park, Baltimore, MD, 1971); Kringlebotn and Gundersen, *Journal of the Acoustical Society of America* 77, 159-164 (1985); Vlaming and Feenstra, *Clinical Otolaryngology* 11, 353-363 (1986a)); in these studies, stapes displacement rolled off at -12.0 to -14.9 dB/oct above 1.0 kHz. It appears that their mean midfrequency stapes displacement slope has been flattened by some unusual results in a small number of ears. Possible reasons for these results are discussed. Author.

The pathophysiology of rhinitis. III. The control of IgG secretion. Meredith, S. D., Raphael, G. D., Baraniuk, J. N., Banks, S. M., Kaliner, M. A. Allergic Diseases Section, National Institute of Allergy and Infectious Diseases, Bethesda, Md 20892. *Journal of Allergy and Clinical Immunology* (1989) Dec, Vol. 84 (6 Pt 1), pp. 920-30.

To examine the sources of IgG in nasal secretions, nasal provocation tests with histamine (H) and methacholine (MC) were performed on 22 subjects. Nasal lavages were assayed for IgG, total protein, albumin (Alb), nonsecretory IgA (nonsIgA), and secretory IgA (sIgA). H stimulation dramatically increased the secretion of IgG, nonsIgA, and Alb and also increased the proportion of these proteins compared to total protein. H-induced protein secretion was significantly inhibited by nasal pretreatment with chlorpheniramine maleate but was unaffected by atropine sulfate. sIgA was also stimulated by H challenge, but unlike IgG and other vascular proteins, the proportion of sIgA to total protein (sIgA per cent) decreased after H challenges. MC stimulation also increased secretion of IgG, Alb, nonsIgA, and sIgA but did not alter their proportions, compared to total protein. Topical atropine significantly inhibited secretion of all proteins, suggesting a mode of transportation mediated by glandular muscarinic receptor stimulation. Thus, MC can increase the amount of IgG secretion, whereas H increased both the amount and relative proportion of IgG in nasal secretions. These data suggest that pharmacologic stimulation of IgG into nasal secretions may be used as a total to modulate mucosal immunity. Author.

Penetration of corticosteroids into the lung: evidence for a difference between methylprednisolone and prednisolone. Vichyanond, P., Irvin, C. G., Larsen, G. L., Szeffer, S. J., Hill, M. R. Ira J., Jacqueline Neimark Laboratory of Clinical Pharmacology in Pediatrics, Department of Pediatrics, National Jewish Center for Immunology and Respiratory Medicine, Denver, CO 80206. *Journal of Allergy and Clinical Immunology* (1989) Dec, vol. 84 (6 Pt 1), pp. 867-73.

Little is known about the penetration of corticosteroids, such as methylprednisolone and prednisolone, into the lung, despite their common use in the treatment of inflammatory lung diseases. To compare methylprednisolone and prednisolone concentrations in the bronchoalveolar space, we administered these two corticosteroids in a randomized, crossover fashion to 17 adult rabbits. A loading dose was administered and was followed by a continuous infusion for 180 minutes to achieve steady-state plasma concentrations between 200 and 2000 ng/ml. Serial plasma samples were obtained during the infusions. Bronchoalveolar lavages (BAL) were performed at 180 minutes with sterile saline. Plasma and BAL fluid (BALF) were assayed for methylprednisolone and prednisolone concentration by high-performance liquid chromatography. Corticosteroid concentrations were normalized to urea concentrations in plasma and BALF. Generally, BALF corticosteroid concentration increased as plasma concentration increased. At plasma concentrations greater than 800 ng/ml, BALF methylprednisolone concentrations increased exponentially, whereas the increase for prednisolone remained linear. BALF methylprednisolone

lone was five times as high as that of prednisolone when plasma corticosteroid concentration was in the 2000 ng/ml range. With this continuous infusion technique, methylprednisolone has a higher degree of bronchoalveolar penetration than prednisolone, and these differences are greater at higher plasma concentrations. Author.

Transtentorial brain herniation in the monkey: analysis of brain stem auditory and somatosensory evoked potentials. Stone, J. L., Ghaly, R. F., Subramanian, K. S., Roccaforte, P., Kane, J. Department of Surgery, Cook County Hospital, Chicago, Illinois. *Neurosurgery* (1990) Jan, Vol. 26 (1), pp. 26–31.

A monkey model of transtentorial brain herniation (TBH) was created to simulate the clinically encountered situation of a gradually expanding intracranial lesion. TBH was produced by extradural balloon inflation over a 4-hour period and documented by the appearance of the pupils as dilated or fixed at midposition. Intracranial pressure (ICP), brain stem auditory evoked potentials (BAEP), and short-latency somatosensory evoked potentials (SSEP) were recorded before, during, and after TBH. Statistical significance from baseline values to TBH was found for diminution of the BAEP amplitude, rise of the ICP, and diminution of the SSEP amplitude. An ICP rise to twice the baseline value and a 25 per cent decrease in Wave V amplitude was found one hour before TBH. Changes in BAEP and SSEP took several minutes after deflation to return to baseline values. Analysis of Wave V of the BAEP was as sensitive as ICP in warning of TBH. Discussion centers upon previous animal studies of brain herniation and ICP elevation, and findings reported in humans deteriorating as a result of intracranial mass lesions. BAEP and SSEP monitoring may be used as noninvasive tests for brain stem compression in the setting of primate TBH, and in the future may be used to guide the effectiveness of therapy. Author.

Florid osseous dysplasia in Orientals. Loh, F. C., Yeo, J. F. National University of Singapore. *Oral Surgery, Oral Medicine, Oral Pathology* (1989) Dec, Vol. 68 (6), pp. 748–53.

Florid osseous dysplasia has been described as a condition that characteristically affects the jaws of middle-aged black women. It usually manifests as multiple radiopaque cementum-like masses distributed throughout the jaws. This condition has also been classified by various authors as sclerosing osteomyelitis, sclerosing osteitis, sclerotic cemental masses, gigantiform cementoma and various other terms. In this series, we want to document eight cases of florid osseous dysplasia in middle-aged, female ethnic Chinese and one case in an Indian subject on the basis of radiographic and histopathologic findings. On the basis of this series, incidence is estimated to be 0.01 case per year 100,000 population. Florid osseous dysplasia constitutes 11 per cent of cemental lesions in our files. Author.

Dentin formation in so-called 'fibro-osteo-cemental' lesions of the jaw: histologic, electron microscopic and immunohistochemical investigations. Burkhardt, A. Institute of Pathology, University of Berne, Switzerland. *Oral Surgery, Oral Medicine, Oral Pathology* (1989) Dec, Vol. 68 (6), pp. 729–38; discussion 739.

Two cases of the so-called fibro-osteo-cemental lesions of the jaws, containing unusual deposits of hard tissue, are described. There were peculiar spheroid calcifications or larger masses forming small cavities with a radial arrangement and discontinuous blasts extending with axonlike cell processes toward an acellular core. For further definition, electron microscopic and immunohistologic studies were done. The most conspicuous features were abundant intracytoplasmic vimentin filaments in the blasts, tight junctions, matrix vesicle formation, a globular accretion pattern and so-called matrix maturation. These findings militate against an osseous or cementous nature of this hard tissue. Rather, both the light and electron microscopic findings are highly compatible with the assumption that the blasts are odontoblasts and that an immature type of dentin is formed. In addition to fibroblasts, osteoblasts and cementoblasts, apparently also a further descendant of the ectomesenchyme—the odontoblasts with dentin formation—may participate in the so-called fibro-osteo-cemental lesions. Author.

Familial gigantiform cementoma: classification and presentation of a large pedigree. Young, S. K., Markowitz, N. R., Sullivan, S., Seale, T. W., Hirschi, R. University of Oklahoma College of Dentistry. *Oral Surgery, Oral Medicine, Oral Pathology* (1989) Dec, Vol. 68 (6), pp. 740–7.

Very few cases of gigantiform cementoma have been reported, and those associated with a positive family history are especially rare. Confusion exists about the relationship of gigantiform cementoma to florid osseous dysplasia, cementifying fibroma and diffuse chronic sclerosing osteomyelitis. It has been unclear whether gigantiform cementoma should be accorded the status of a separate entity. In this article, we report our findings on a family that, over five generations, has exhibited clinical, radiographic and/or histologic findings consistent with the designation familial gigantiform cementoma. This pedigree consists of 55 members. Significant heterogeneity in expression of this trait was noted. The pattern of occurrence of the trait is consistent with an autosomal dominant mode of inheritance with variable expressivity of the phenotype. We suggest that familial gigantiform cementoma should be recognized as a separate entity. Author.

Heterotropic brain tissue in the oropharynx. Report of a case. Momose, F., Hashimoto, K., Shioda, S. First Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Tokyo Medical and Dental University. *Oral Surgery, Oral Medicine, Oral Pathology* (1989) Dec, Vol. 68 (6), pp. 682–5.

A case of a seven month old boy with oropharyngeal heterotropic brain tissue is presented. The lesion, which protruded from the right side of the oropharynx, occupied the oropharyngeal space and pressed the tongue forward and downward. A cranial computed tomograph showed that the mass had some radiolucent areas. Surgical treatment was performed to remove the respiratory and feeding distress. Histologically, the lesions consisted of matured glial cells, ependymal clefts with choroid plexus and scattered pigmented cells in a part of lining cells of cyst wall. Author.

Evaluating the impact of a home screening test for streptococcal pharyngitis. Walker, A. M. Epidemiology Resources, Inc., Chestnut Hill, MA 02167. *Pediatric Infectious Diseases* (1989) Nov, Vol. 8 (11), pp. 834–7.

Home screening tests must be evaluated as an aid to self-referral to a physician and should not be judged as if they were diagnostic procedures, i.e. the sole determinants of a therapeutic decision. The performance characteristics of a test are properly compared to those of the patient or parent, operating in the absence of the test. For streptococcal pharyngitis there would be a net increase in the number of cases correctly treated whenever the sensitivity of the home test (multiplied by the probability that the patient will act upon the test results) exceeds the a priori probability that the patient will be seen by a physician in the absence of the test. Use of home screening tests is likely to increase the number of patient-physician contacts among persons with sore throats and will do so proportionately more frequently among those with streptococcal pharyngitis. Author.

Anatomic and audiologic sequelae after tympanostomy tube insertion or prolonged antibiotic therapy for otitis media. Pichichero, M. E., Berghash, L. R., Hengerer, A. S. Department of Pediatrics, University of Rochester Medical Center, NY. *Pediatric Infectious Diseases* (1989) Nov, Vol. 8 (11), pp. 780–7.

In this study the anatomic and hearing sequelae are characterized for 43 children (86 ears) with recurrent acute otitis media and/or persistent otitis media with effusion who had received three or more tympanostomy tube placements and 46 children (92 ears) managed medically with repeated courses of therapeutic and/or prophylactic antibiotics. In the surgical group 311 tympanostomy tube surgeries had been performed and in the medical group 1334 episodes of acute otitis media and/or 186 episodes of otitis media with effusion occurred. Tympanosclerosis was found in 6.5 per cent of the medical group ears and 52.3 per cent of the surgical group ears. Tympanic atrophy occurred in 4.3 per cent of the medical group ears and 40.7 per cent of the surgical group ears. The duration of the presence of the tympanostomy tube significantly influenced the tympanic membrane. The presence of middle ear fluid at the time of tube insertion, particularly high viscosity ('glue') fluid, correlated with persisting sclerosis (P less than 0.00001) and reduced tympanic membrane mobility (P less than 0.00001) but not tympanic membrane atrophy (P = 0.94) later. Abnormal hearing, defined as a hearing threshold greater than 20 dB occurred in 9.3 to 18.7 per cent of the surgical ears and in 3.7 to 9.0 per cent of the medical ears depending on the hearing frequency tested. Medical management consisting of recurrent use of therapeutic and/or prophylactic antibiotics was associated with infrequent anatomic and audiologic sequelae. Repeated placement of tympanostomy tubes

may be associated with the frequent occurrence of both anatomic and audiologic sequelae. Author.

Three-years' experience of transdermal scopolamine: long-term effectiveness and side-effects. Shupak, A., Gordon, C. R., Spitzer, O, Mendelowitz, N., Melamed, Y. Motion Sickness and Human Performance Laboratory, Israeli Naval Hyperbaric Institute, Haifa. *Pharmatherapeutica* (1989), Vol. 5 (6), pp. 365-70.

A study was carried out in 68 otherwise healthy male naval crew members to assess the long-term effectiveness and side-effects of routine transdermal scopolamine administration for the prevention of seasickness. The transdermal patches were applied to the mastoid process before each sailing and the subjects generally used two patches a week. Check-ups were made every three months over a period of three years. The average reported seasickness severity (on a scale of 0 to 7) after six months at sea prior to the administration of transdermal scopolamine was 5.64 \pm 0.11 (mean \pm S.E.M.), in comparison with 3.14 \pm 0.23 post-administration (p less than 0.001). A significant improvement was found in the self-estimated performance at sea whilst receiving the drug: 65.7 per cent \pm 3.38 per cent (mean \pm S.E.M.), compared to 25 per cent \pm 2.24 per cent beforehand (p less than 0.001). Contact dermatitis precluded the use of transdermal scopolamine in 3 (4.4 per cent) subjects. The only other significant side-effect was dryness of mucous membranes. In conclusion, transdermal scopolamine was found to be effective in the prevention of seasickness and improvement of performance at sea during three years of follow-up and routine administration of the drug was not complicated either by severe side-effects or by performance disturbances. Author.

Cervical myelography: survey of modes of practice and major complications. Robertson, H. J., Smith, R. D. Department of Radiology, Louisiana State University Medical Center, New Orleans 70112. *Radiology* (1990) Jan, Vol. 174 (1), pp. 79-83.

A total of 68 major complications of cervical myelography were

reported by 220 neuroradiologists in a mail survey. Two-thirds of the complications were attributed to cervical spine hyperextension and one-third to lateral C1-2 puncture. Narrow sagittal diameter of the spinal canal and severe cervical spondylosis were frequent contributing factors to hyperextension injury of the cervical spinal cord. Clinical and radiographic premyelography screening is suggested, with magnetic resonance imaging performed first in patients with spinal canal stenosis, severe spondylosis, and/or myelopathy of any cause. Neck extension should be monitored with lateral fluoroscopy for accurate needle positioning and prevention of contrast medium injection into the spinal cord. Author.

Clinical infections and nonsurgical treatment of parapharyngeal space infections complicating throat infection. de Maric, S., Tjon A Tham, R. T., van der Mey, A. G. Meerdink, G, van Furth, R., van der Meer, J. W. Department of Infectious Diseases, University Hospital Leiden, The Netherlands. *Review of Infectious Diseases* (1989) Nov-Dec, Vol. 11 (6), pp. 975-82.

The clinical features and management of eight patients with parapharyngeal space infection who presented with swelling of the neck subsequent to sore throat are described. In four patients the interval between the initial throat symptoms and swelling was two days or less, and the disease was rapidly progressive with stridor or a descending mediastinitis. In the other four cases, this interval was longer (4 to 14 days) and the infection was fairly localized. Computed tomography was useful for making the diagnosis, establishing that the infection had spread into other deep neck spaces and the mediastinum, distinguishing abscesses from diffuse cellulitis, guiding drainage aspiration and assessing the response to therapy. None of the patients underwent extensive surgical drainage of the deep neck spaces. A nonsurgical approach with antibiotics, including high doses of benzylpenicillin and computed tomography-guided selective needle aspirations proved successful. Even patients with distinct abscesses were completely cured. Author.