

ABSTRACTS

EAR

Otitis Externa Granulosa. NORMAN A. PUNT, London. *British Medical Journal*, 1949, i, 989.

The author points out that the presence of granulations within the external auditory meatus is usually regarded as indicative of chronic suppurative otitis media, and that it seems less well known that such granulations may be found in the presence of an intact drumhead and normal middle ear. While Command Otologist for Austria, over a twelve months period, Punt observed thirteen cases of otitis externa granulosa (and during the same period saw 118 cases of otitis externa without granulations). Most of the cases were seen during the hot weather and an association with swimming generally seemed to be etiologically significant. The cases with otitis externa granulosa were usually those in which the cutaneous inflammation was especially severe or neglected and in which there was a foul-smelling purulent discharge. As regards treatment, the most important thing was gentle but thorough daily cleansing of the meatus, granulations being removed with crocodile forceps and a silver nitrate bead fused on a probe occasionally used.

R. SCOTT STEVENSON.

Which is the Preferable Method of Performing the Caloric Test?
L. B. W. JONGKEES, Utrecht. *Archives of Otolaryngology*, 1949, xlix, 594.

The best method of performing the caloric test is discussed, and reasons are given why the duration of the nystagmus is the best indicator of the reaction of the labyrinth on caloric stimulation. The time of latency, the frequency and the sensations of the subject are less suitable on account of their unreliability. The influence of the position is examined; the best position for the test is the normal horizontal position with the head lifted up some thirty degrees on a pillow (Brünings). The influence of the quantity of water is extremely small. For purely practical reasons, the use of 50 c.c. is recommended. This quantity gives a reaction which is easily measured and does not need special arrangements. A normal ear syringe has this capacity.

The best temperatures to use are about 30° and 44° C., as with these the maximum reactions are obtained with the smallest stimulation, and they do not cause disagreeable symptoms in the patients. There is no need to be especially careful with the direction and speed of the syringing, as the influence of these factors is small or non-existent. Experiments with bilateral syringing confirmed the data mentioned. The diagram given by Hallpike has proved to be extremely useful in the clinical registration of the caloric test. The use of cold and warm water is necessary not only to be sure of the presence of any remainder

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of function of a labyrinth but also to distinguish between directional preponderance and predominance of one labyrinth, a distinction seemingly of great importance for neurologic symptomatology.

The preferable method of performing this test seems to be the following: The subject is placed in the normal horizontal position, the head flexed on a pillow at 30 degrees. Both ears are syringed with 50 c.c. of water at temperatures of 30° and 44° C. The interval between the four tests need not be longer than six minutes. In this way the duration of the whole examination is not longer than about twenty minutes, and it gives every result which may be expected from this kind of examination. The use of the diagram of Hallpike is recommended.

R. B. LUMSDEN.

NOSE

Diagnosis of Malignancy of the Nasopharynx: Cytological studies by the Smear technique. LEWIS F. MORRISON, EUGENE S. HOPP and ROSALIN WU, San Francisco. *Annals Otol., Rhin. and Laryng.*, 1949, lviii, 18.

The promising results obtained by the smear technique in malignant disease of the lung, have led to an investigation of the results obtainable by similar methods in the nasopharynx. While the results are excellent, it cannot be regarded as a substitute for biopsy. The knowledge of the normal cytology of the area is an essential prerequisite. The procedure is time-consuming, demanding meticulous attention to detail, and can only be made by a cytologist fully conversant with the area. It has nothing to offer to the casual observer.

E. J. GILROY GLASS.

Congenital Choanal Atresia: a new Transpalatine technique. DAVID A. DOLOWITZ and EDWARD B. HOLLEY, Salt Lake City. *Archives of Otolaryngology*, 1949, xlix, 587.

A surgical method employing earlier techniques and yet preserving functions of the nasal mucous membrane is suggested, whereby the bony obstruction is removed and the normal function of the nasal mucous membrane is maintained, by a transpalatine technique. A new nasal passage is formed which is lined with flaps of ciliated mucous membrane. One case is reported in which this technique was used.

R. B. LUMSDEN.

Benign Cysts of the Paranasal Sinuses. HAROLD F. SCHUKNECHT and JOHN R. LINDSAY, Chicago. *Archives of Otolaryngology*, 1949, xlix, 609.

Benign cysts of the paranasal sinuses may be divided into two groups, those arising from the sinus mucosa and those of dental origin. Three types arise from sinus mucosa:—

(1) Non-secreting cysts, found in the maxillary sinus.—They arise in the connective tissue layer as a result of chronic inflammation and contain straw-coloured fluid of high protein content. As they become large, both local and general toxic symptoms may be produced. They have a thin wall and rupture before causing deformity.

(2) Small retention (glandular) cysts.—These are common in hyperplastic sinus mucosa and are probably due to obstruction of the duct by hyperplastic

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epithelium. They occur as part of the pathologic process in chronic inflammatory disease of the sinuses; they are not individually evident in roentgenograms but may be seen during surgical removal of the mucosa.

(3) Mucocoeles.—These are commonly found in the frontal and ethmoidal sinuses. They are apparently due to obstruction of the outlet of the sinus into the nose. They erode the bony walls and may produce facial deformity.

Benign cysts of dental origin which may involve the maxillary sinus are as follows:—

(1) Follicular cysts.—These arise from the enamel organ epithelium, may or may not contain teeth, may encroach on the maxillary sinus and nasal cavity and may produce external deformity.

(2) Radicular (root) cysts.—These develop from apical granulomas and may or may not have an epithelial lining. (Authors' summary.)

BRONCHUS

Presenting Symptoms of Carcinoma of the Bronchus. J. PETER BUSH, Barnstaple. *British Medical Journal*, 1949, ii, 471.

The author observes that carcinoma of the bronchus may give rise to a variety of presenting symptoms and records the mode of presentation in seventeen cases seen during a six months' appointment as house physician. In these unselected cases from the medical and surgical wards of a general hospital nearly half presented with symptoms caused by metastases. In the first group of nine cases, the symptoms were caused by the primary growth, and included cough, hæmoptysis, blood-stained sputum, pain in the chest, dysphagia, and superior vena caval obstruction. In the second group of two cases the symptoms were caused by the primary growth but simulated pleuro-pulmonary infection, fever, and symptoms and signs suggestive of unresolved pneumonia or empyema. In the third group the symptoms were caused by a secondary growth; three showed evidence of paraplegia, one cerebral tumour, one pain in the abdomen (ileum), and one gross enlargement of the liver.

R. SCOTT STEVENSON.

ŒSOPHAGUS

Perforations of the Œsophagus. LESLIE J. TEMPLE, Liverpool. *British Medical Journal*, 1949, ii, 935.

The author points out that tearing by foreign bodies, including œsophagoscopes, still remains the commonest cause of perforation of the œsophagus, and stresses the importance of early diagnosis and primary suture of the tear. He reports three cases:—one was a criminal who swallowed three safety-razor blades and sustained multiple œsophageal perforations, successfully treated by primary suture; the second was a woman who had swallowed a chicken-bone, which caused a tear one inch in length in the posterior aspect of the œsophagus just above the diaphragm and gave rise to gross infection of the left pleural cavity—the perforation was sutured, but the patient died from the severe infection, in spite of large doses of penicillin; the third patient sustained a small perforation from a spike of bone and recovered with conservative treatment only—1,000,000 units of penicillin daily.

R. SCOTT STEVENSON.

Miscellaneous

MISCELLANEOUS

Necrosis within the Pterygopalatine Fossa: Operation and Recovery.
N. ARTHUR FISCHER and ARTHUR J. FISCHER, Pittsburgh. *Archives of Otolaryngology*, 1949, xlviii, 337.

The terms "sphenomaxillary fossa", "pterygomaxillary fossa", "sphenopalatine fossa" and "pterygopalatine fossa" are all synonymous. The following symptoms and signs should make the surgeon think of infection in this region: (1) unilateral proptosis; (2) soft tissue swelling in the temporal area of the same side; (3) pain in the distribution of the sphenopalatine ganglion. Four routes of surgical approach have been described: transorbital, transzygomatic, transpalatal and transantral. Of these, the transantral, described by Sewall, seems to have the greatest advantage. A case of necrosis of the pterygopalatine fossa with operation and complete recovery is presented.

R. B. LUMSDEN.

Treatment of Pneumococcal Meningitis. JOHN KERSHMAN and ERIC PETERSON, Montreal. *Canadian Medical Association Journal*, 1948, lix, 527.

Twelve consecutive patients were treated for pneumococcal meningitis during an eighteen months period at the Montreal Neurological Institute and the Jewish General Hospital in Montreal. Ten made a complete recovery, but developed a transverse myelitis, and one (a man aged 73) died of bronchial obstruction caused by the aspiration of mucus in the immediate post-operative period following a simple mastoidectomy and intranasal antrostomy. Headache appeared to be an invariable component of the disease, but only one-quarter of these cases complained of a stiff neck; only slightly more than one half of the patients showed stiffness of the neck and a positive Kernig's sign at the time of admission. Recent otitis media or mastoiditis and sinusitis were the most common primary lesions, and in several instances the ears and sinuses were involved together. Lumbar puncture was an invaluable diagnostic procedure—all showed pneumococci in culture at the first examination—and radiology of the skull and chest was an important part of the investigation. In only one instance did the X-ray fail to corroborate what was considered clinically to be an active infection in the nose and throat; much more often the X-ray showed evidence of infection which could not be detected by clinical examination.

After chemotherapy had been started, and as soon as the patient's general condition permitted, it was felt that treatment of the primary focus should be undertaken. Mastoidectomy was performed in four cases, sinus irrigation in three, and myringotomy in one. Before the introduction of penicillin, sulphonamide therapy had reduced the mortality rate to about 70 per cent. to 80 per cent.; since the introduction of penicillin the mortality rate had declined much further. The extremely satisfactory results obtained in this series were attributed to the intrathecal as well as intramuscular use of penicillin, and especially to early and radical treatment of the primary focus.

J. CHALMERS BALLANTYNE.

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Myasthenia Gravis : Brief Notes Regarding Diagnosis and Treatment. FRANK B. WALSH, Baltimore. *Canadian Medical Association Journal*, 1949, lx, 17.

While the problems of myasthenia gravis must be chiefly the concern of the neurologist, it may fall to the laryngologist to recognize the condition. The author of this paper quotes Viets as saying that about 20 per cent. of his series of cases suffered from dysphagia. Dysphagia and dysarthria were commonly associated symptoms, and with them regurgitation of fluid through the nose was likely to occur. In rare instances the individual with myasthenia gravis might be essentially neostigmine-resistant—two such cases are recorded. From an extensive review of the literature, the author was convinced that thymectomy gave good results in some cases but that it was probably unsound to reserve operation only for late and severe cases. J. CHALMERS BALLANTYNE.

Lupus Vulgaris and Vitamin D₂. EMILE GAUMOND, Quebec. *Canadian Medical Association Journal*, 1948, lix, 522.

Of nineteen patients treated over a period of two years, ten were women and nine men. 600,000 units (15 mgm.) of calciferol (in alcoholic solution) were given by oral administration three times during the first week, twice a week during the next three weeks, and once a week for a period of months. Milk (or calcium in some other form) should be taken throughout the course of treatment, and salt and fats should be reduced. The lupus of longest standing had persisted for fifty years and the most recent for six or seven years. All cases were greatly improved clinically and histologically. No deleterious effects were noted with these doses and with the precautions mentioned. The "cure" was due, not to a calcification of the lesions, but to a sclerosis. The mode of action, though still uncertain, might be due to a process of phosphorylation of an enzyme. J. CHALMERS BALLANTYNE.

Antibiotics in the Treatment of Diseases of the Ear, Nose and Throat. A. C. FURSTENBERG, Ann Arbor. *Annals Otol., Rhin. and Laryng.*, 1949, lviii, 1.

The time has come to review the indications for the use of the antibiotics and to check their indiscriminate use. In the case of penicillin, the first principle in its use is that the organism shall be penicillin-sensitive. Ideally, every case should be bacteriologically investigated, but in the ordinary course of practice this is impracticable. In the vast majority of patients with acute otitis media, furunculosis or acute sinusitis, the organism is penicillin sensitive and penicillin treatment can be commenced, but if a response to treatment is not obtained within 72 hours, there must be reason to fear resistant organisms and bacteriological investigation is called for. It is useless to persist for a longer period without bacteriological study in the absence of improvement. In the case of meningitis the situation is too critical to permit of cultural studies before commencing treatment. Penicillin or streptomycin therapy should be commenced immediately, both systemically and intrathecally. Aureomycin or chloromycetin might also be employed with advantage. These latter two are interesting, in that the preliminary tests suggest that they are effective in the

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intracellular infections, and also that they are effective when given by the mouth.

The second principle governing the effectiveness of penicillin is that it must come into actual contact with the organism and maintain a sustained contact. Local use in the nose or throat falls short of this objective. It is futile to expect phenomenal results from penicillin sprayed into the nasal cavities. In the secondary infections of acute rhinitis the organisms are submucosal, and cannot be reached by agents placed upon the surface. The author has found little reason for enthusiasm in the local use of penicillin in the mouth and throat, except possibly in the application of tampons in local ulcerative lesions of the mouth. The results of using penicillin aerosol have been disappointing, but local bronchoscopic instillation of penicillin in bronchiectasis has proved promising. Local or systemic penicillin has little or no place in the treatment of either chronic suppurative otitis media, chronic sinus infection or chronic abscess.

There is no doubt that the administration of penicillin can change the normal flora of the throat, and by so doing may precipitate an acute infection from a secondary organism. The use of streptomycin in tuberculous infections of the larynx and of the ear has greatly improved the mortality rate, but its local application has not yielded satisfactory results. Recent experiments with the catalytic hydrogenation produced of streptomycin, dihydrostreptomycin indicates that it is about 70 per cent. less toxic than the original preparations, but it cannot be used intrathecally owing to its irritating properties on the meninges.

E. J. GILROY GLASS.