

ABSTRACTS

EAR.

Geographic virulence of Mastoiditis. MERCER G. LYNCH, M.D. (New Orleans).
Jour. A.M.A., September 7th, 1940, cxv, 10.

The writer made a study of the geographic variation in the incidence of mastoiditis in the United States. In the deep south in proportion to population mastoiditis is comparatively rare, while the peaks are reached in the northern and eastern limits. Acute infections of the mastoid also reach their peak in the spring of the year following the cold weather.

Through the co-operation and assistance of otolaryngologists throughout the country, cultures of hæmolytic streptococci were received and individual studies made under different conditions of climate, diet, exercise and illness, the guinea pig being used as the host. From these studies it was concluded that the areas of the country where the climate varies markedly, where extremes of cold were encountered and where open-air exercises were thus limited, the resistance of the population is lowered and they are more susceptible to infection. It was noted also that the organisms themselves increased in virulence in the colder climates and tended to lose their virulence in more uniform climates. Also it was noted that diets rich in vitamins made for better resistance on the part of the patient. ANGUS M. CAMPBELL.

Masking of the pathological status in Otitis Media by Chemotherapy.
A. A. CIRILLO. *Archives of Otolaryngology*, xxxvi, no. 4. October, 1942.

The writer considers it unwise and often misleading to prescribe sulphanilamides in indiscriminate fashion in all cases of otitis media.

There is a danger of sensitizing the patient, injuring the liver or kidneys, or rendering the patient drug-fast. The main disadvantage, however, is that chemotherapy masks the symptoms of progressing otitis, and thus increases the difficulty of diagnosis of complications should these arise.

Three case histories are quoted to illustrate the masking of symptoms of sinus thrombosis when sulphonamide had been given as treatment for the otitis. A recent questionnaire has shown that the majority of otologists do not favour the routine use of chemotherapy in uncomplicated otitis media.

DOUGLAS GUTHRIE.

New bone growth due to cold water in the ears. E. P. FOWLER and P. M. OSMAN.
Archives of Otolaryngology, xxxvi, No. 4. October, 1942.

Van Gilse reported that exostoses in the external auditory canal result from swimming in cold water, and that the condition is commoner in Holland than in Italy, as the water of the North Sea is colder than that of the Mediterranean.

The writers of the present paper, in examining 25 patients with hyperostosis and 9 patients with exostosis, during three years of practice, found that all but 4 were ardent cold-water swimmers. In order to investigate the

Nose

effect of cold water on the external auditory canal in animals, the writers subjected guinea pigs to cold syringing, under anaesthesia, for an hour at a time on several occasions. In 4 animals thus investigated there was found diffuse bone formation in the bulla of the middle ear on the experimental side, the new bone formation being in proportion to the duration and frequency of the syringing. No changes were found in the labyrinth capsule. The original observation of Van Gilse has therefore been confirmed experimentally.

DOUGLAS GUTHRIE.

NOSE.

Sinusitis and the Common Cold.

R. M. DOWDESWELL (*Lancet*, 1942, ii, 763) points out that infections of the accessory nasal sinuses are prevalent in childhood as well as in adult life, and are often diagnosed as recurrent colds. Case histories and bacteriological findings suggest that apart from unmistakable cases of sinusitis, many are only mild and others have exacerbations of a chronic latent infection with possibly long quiescent periods; and that primary mild sinusitis may remain as a latent infection. The possibility of sinusitis should be seriously considered and the sinuses investigated in any case of pyrexia of unknown origin, influenza or febrile catarrh. The paper is the outcome of a study of sixty cases of common cold seen in practice.

MACLEOD YEARSLEY.

NASOPHARYNX.

Fibromas of the Nasopharynx. FREDERICK A. FIGI, M.D. (Rochester, Minn.).
Jour. A.M.A., August 31st, 1940, cxv, 9.

Juvenile basal fibromas of the nasopharynx are rare. The writer reviews sixty-three patients of this type seen at the Mayo Clinic during the past thirty years. Choanal polyps, periosteal fibromas, fibrosarcomas and other forms of fibrous tumours are excluded. The tumours occur predominantly in young male patients, appear about the age of puberty and tend to regress spontaneously about the twentieth year.

The tumours are primarily pure fibromas, consisting of dense connective tissue and contain many vessels, often cavernous in type.

Generally speaking a biopsy should be taken but as bleeding is likely to be profuse, the diagnosis should be made on the individual history, the hardness of the tumour, the age of the patient, and the clinical picture. The tumours can usually be best revealed in lateral X-ray pictures taken to show the upper part of the cervical region of the spinal column.

These tumours usually spring from some point situated high on the posterior wall of the vault of the nasopharynx and often extend into one or both nasal fossa and nearby sinuses as well.

Treatment has undergone considerable change in the last twenty-five years. Surgical removal of these tumours involves considerable risk and recurrence is frequent. Implants of radium and electric coagulation supplemented with radium are the most effective forms of treatment, and fewer complications are likely to be encountered if this treatment is carried out in stages.

There was no mortality in this series. The article is freely illustrated and has a bibliography.

ANGUS A. CAMPBELL.

Abstracts

PHARYNX.

Acute Abscess of the Throat in Childhood. WILLIAM DEERING, M.D. (Chicago), and JOSEPH BRENNEMANN, M.D. (Los Angeles). *Jour. A.M.A.*, April 4th, 1942, cxviii, 14.

This report deals with two hundred and fifty cases of throat abscess formation in children up to fourteen years of age. These are classified into retropharyngeal, retrotonsillar and peritonsillar abscesses. The retropharyngeal was almost restricted to less than two years of life. The retrotonsillar was more prominent during the third and fourth years, and the peritonsillar abscess occurred after the seventh year. The differentiation between the abscesses in the throat is made by inspection and palpation. The abscess is accompanied by distressing pain on swallowing, noisy breathing, choking, localized swelling in the throat and cervical adenitis.

The abscess should not be drained until there is advanced fluctuation, which means there is a high incidence of spontaneous rupture. Sulphanilamide was used in twenty-eight of the later cases and fourteen of these did not suppurate.

There were three deaths in the series, two of pneumonia and one from hæmorrhage due to a large erosion of the internal carotid artery. Repeated pharyngeal hæmorrhage practically establishes the diagnosis of blood vessel erosion and makes the indication for surgical intervention imperative.

Cervical abscesses developed in twelve cases and these abscesses had to be opened externally.

ANGUS A. CAMPBELL.

MISCELLANEOUS.

Poliomyelitis following Tonsillectomy in five members of a family.

THOMAS FRANCIS, Jun., M.D. (Ann Arbor, Mich.), CARL E. KRILL, M.D. (Akron, Ohio), JOHN A. TOOMEY, M.D. (Cleveland), and WALTER N. MACK, M.S. (Ann Arbor, Mich.). *Jour. A.M.A.* August 22nd, 1942, cxix, 17.

In August, 1941, a family consisting of six children who were well and active, lived in a city relatively free from poliomyelitis. The five oldest children were subjected to tonsillectomy. In two weeks all five children who had been operated on developed severe bulbar poliomyelitis, of which three of them died.

The parents and one child who had not been operated on showed no sign of illness, although poliomyelitis virus was recovered from the child's stool. The virus was recovered from the stools of two cousins living fifty miles away and with whom two of the children had visited a month earlier. There was no recognized exposure to cases of known or suspected poliomyelitis.

The writers feel that the operative procedure was the factor precipitating the severe bulbar form of poliomyelitis in children who would otherwise have escaped with inapparent infections. These observations emphasize again the danger inherent in tonsillectomy during the season in which poliomyelitis occurs, even if it is not notably present in the community.

ANGUS A. CAMPBELL.

Miscellaneous

Halitosis. BURRILL B. CHRON, M.D., and RUDOLPH DROSD, M.D. *Jour. A.M.A.*, December 27th, 1941, cxvii, 26.

The writers report five experiments on patients, some of whom had gastrostomy and colostomy. The substances used were garlic, peppermint, winter-green and whisky. Methods of precision and titrimetric estimations of odours have proven less satisfactory than the direct use of the nose.

Unless some definite pathological condition is present in the nose or throat, the mouth, teeth, pharynx and stomach play little or no part in the production of essential halitosis. The large and small intestines are the critical points, for the mucosa allows the absorption of noxious materials, their transport to the liver and their further migration by way of the circulation to the lungs and thence to the breath.

Patients suffering from true halitosis are often greatly benefited by a low fat diet.

ANGUS A. CAMPBELL.

Radiological Examination of Œsophageal Spasm may lead to error in localizing the lesion which caused the spasm. NAVILLE, F., and HERMANN, R. *Schweiz. med. Wschr.*, No. 47, 1942.

Reviewing the usual causes of œsophageal spasm, the authors state that generally the site of spasm coincides with that of the cause—traumatic or ulcer. A case is described: a man of 39 swallowed a piece of bone and immediately suffered from severe retro-sternal pain. With barium swallow X-rays showed a spasm at the lower end of the œsophagus. Death took place from profuse hæmorrhage eight days later. At post-mortem ulceration found in œsophagus leading into the aorta.

The lower end of œsophagus was normal.

W. M. MOLLISON.

Ludwig's Angina. C. H. McCASKEY. *Annals of Oto-laryngology*, xxxvi, No. 4, October, 1942.

Since Ludwig, Physician to the King of Würtemberg, wrote his classical description of this disease in 1836, little has been added to our knowledge of the condition, which consists of a rapidly spreading cellulitis of the submaxillary region and floor of the mouth. The disease is common in males, and between the ages of 20 and 50 years. Dental infection is the most frequent cause; it is doubtful whether tonsillar infection can ever be the source of Ludwig's angina. The organism varies: streptococci are always present in association with other organisms. Treatment consists in free incisions to relieve tension and to evacuate pus. Intra-oral incisions should be avoided. Hypertonic saline is the best dressing. Hot fomentations favour resolution. Drugs of the sulphonamide group are indicated. Tracheotomy is demanded in exceptional cases.

DOUGLAS GUTHRIE.

Local Use of Sulphanilamide and its Derivatives in the Ear, Nose and Throat.

E. S. CONNELL and B. C. TROWBRIDGE. *Archives of Otolaryngology*, May 1942, xxxv, 5.

The local use of sulphanilamide and sulphathiozole powder has produced good results in acute and chronic suppurative otitis media. Sulphathiozole

Abstracts

is to be preferred when the Staphylococcus or Pneumococcus are the organisms responsible. Powdered preparations are more satisfactory than liquid preparations. After thorough cleansing, the powder is applied by insufflation and this is repeated daily. The local application need not interfere with the oral administration of sulphanilamide when that is indicated.

Acute and chronic rhinitis and sinusitis also respond well to the powder, which does not appear to reduce ciliary activity. Apparently it is soluble in the tissue fluids and causes no irritation. After operation on the nasal sinuses, it favours healing. It is also a useful application after tonsillectomy.

There is no advantage in using a sterile powder, and the efficiency may be impaired by sterilization.

This paper is of a general nature and no cases are reported in support of the writers' statements, nor are any statistics given. DOUGLAS GUTHRIE.

The Use in Otolaryngology of Microcrystals of Drugs of the Sulphanilamide Group. L. E. SILCOX and H. P. SCHENK. *Archives of Otolaryngology*, August 1942, xxxvi, 2.

Shortly after the introduction of sulphanilamides as bacteriostatic agents, experiments were made to ascertain whether the oral administration, which often gave rise to toxic symptoms, could be supplanted by the local use of the drugs. Various topical applications were tried, and the most successful appeared to be a 5 to 10 per cent. solution of sulphathiozole. Even this preparation must be used with caution, and a safer and more effective preparation is a 5 per cent. suspension of crystals of sulphathiozole in normal saline. It is essential that the crystals should be small enough to pass easily through a No. 26 hypodermic needle. When vaso-constriction is desired, the crystals are suspended in a 1 per cent. solution of paredrine hydrobromide.

The writers' technique was as follows. The suspension was sprayed into both sides of the nose in cases of acute rhinitis or was introduced by irrigation following puncture, in cases of maxillary sinusitis. In no instance was the application followed by toxic symptoms or irritation.

A summary of the cases treated is given in a series of six tables, and the infecting organism is mentioned in each case. In 27 cases of acute rhinitis, comparison is made with 22 similar cases in which sulphathiozole was not used. Among the treated cases complications were fewer and recovery more rapid.

The cases of acute maxillary sinusitis, 18 in number, cleared up rapidly within a few days. Uniformly good results are also reported from the treatment of 52 cases of acute and chronic sinusitis, in most of which streptococcus hæmolyticus was found. Even long-standing cases with fetid discharge were completely cured. Used in the post-operative treatment of the Caldwell-Luc operation on the maxillary sinus, the method gave excellent results in 14 cases.

In a small series of cases of chronic suppurative otitis the local use of the sulphathiozole suspensions appeared to be less effective, but further trial is justified. Extended observation is also indicated in conjunctivitis and salivary duct infection. In each condition, three patients were treated, and the drug caused no irritation although the number is too small to justify a conclusion as to the efficacy of the treatment. DOUGLAS GUTHRIE.