

## ABSTRACTS

### GENERAL

*Bollettino della Societa Italiana di Fonetica sperimentale, Fonetica biologica, Foniatria, Audiologia*, 1950, Anno 1, Fasc. 1.

This society, which was founded in June, 1950, and concerns itself with the problems of speech and hearing, has produced the first number of its journal. Professor Arslan contributes a description, with photographs, of the working of the laboratory of phonetics at Padua. All possible means of examining the methods of producing the voice and of testing the hearing are employed. Stroboscopic examination of the larynx, recording of the voice by wire and disc gramophones, analysis of speech by the cathode ray oscillograph, the most complete audiometric examination of hearing and psychological investigation of intelligence and capacity for re-education are all used before instruction is begun. Of 400 new patients attending, 140 were deaf, and 48 had had the operation of laryngectomy and were being re-educated to speak. The remainder included many different types of dysphonia, of which rhinolalia due to defective palate formed the largest group. Two members of Professor Arslan's staff describe an investigation into this type of speech defect, and they have used lateral radiography to detect abnormalities in the position and action of the palate, variations in the shape of the nasopharynx, of the adenoid mass and of Passavant's bar.

Lateral radiography is also used by the staff of Professor Pietrantoni's Clinic at Milan to examine œsophageal speech in the laryngectomized patient, and a series of radiographs show the formation and passage of the air bolus during the formation of the vocal sound. Difficulties in this method of production may be analysed by fluoroscopic examination and the patient may be helped by showing a series of radiographs of his own efforts and of the perfect technique.

Dr. Sartorio of Milan contributes an article on the phonetic considerations in posterior crico-arytenoid paralysis before and after King's operation. He examines the vocal cords with the stroboscope and is better able to assess their power of movements by this means than with the plain mirror. The quality of the voice depends on the ability of the non-operated cord to move over towards the operated and abducted one. This, in a case of bilateral paralysis, must depend on the action of the extrinsic muscles. Immediately after King's operation the voice is deep and rough, partly due to œdema, and as the swelling passes off the voice improves, but the improvement is partly due to the more efficient action of the extrinsic muscles.

F. C. ORMEROD.

# Abstracts

## EAR

*The Maintenance and Improvement of Hearing in Radical Mastoid Surgery.*  
JOSEPH A. SULLIVAN, Toronto. *Canadian Medical Association Journal*,  
1951, lxiv, 113.

The author has succeeded, in certain cases, in improving the hearing after radical mastoid surgery by the use of two small artificial appliances. One is called an "artificial middle ear", and consists of a cylindrical lucite mould which is inserted into the outer part of the external auditory meatus. A thin membrane, stretched over the medial end of the mould and held in position by a silver ring, is perforated by a slender nylon rod which makes contact with either the oval window or the round-window niche. Considerable effort is required to obtain good results with this prosthesis, but the other type, the "plastic insert", is less efficient, though much easier to fit. The insert is a plastic tube, made of "korogel", which is placed in contact with the middle ear. Photographs and some convincing audiograms are reproduced.

J. CHALMERS BALLANTYNE.

*Cholesteatomatous Cysts Secondary to Incomplete Removal of the Cholesteatomatous Matrix.* JOSEPH W. BEGLEY, JR. and HENRY L. WILLIAMS, Rochester, Minn. *Archives of Otolaryngology*, 1951, liii, 147.

Two cases are reported of external cholesteatomatous cysts of the mastoid that developed subsequent to radical operations for the removal of aural cholesteatomas. It is postulated that these lesions developed from remaining cholesteatomatous matrices. Thorough removal of the cholesteatomatous matrix is advocated in the surgical treatment of aural cholesteatomas.

(Authors' Summary.)

## NASAL SINUSES

*Unilateral Pansinal Mucocoele Simulating a Malignant Neoplasm: Report of a Case.* WALTER P. ANTHONY and HENRY L. WILLIAMS, Rochester, Minn. *Archives of Otolaryngology*, 1951, liii, 189.

True mucocoeles of the texture of those found in the ethmoids and frontal sinuses may occur in the maxillary sinus. Mucocoeles in the sphenoid sinus, although they rarely occur, may develop and expand rapidly and produce extensive destruction of bone simulating that of a malignant neoplasm. These observations must be considered in differential diagnosis.

R. B. LUMSDEN.

## PHARYNX AND NASOPHARYNX

*Neoplasm of the Nasopharynx.* PIERO SCEVOLA. *Archivio Italiana di Otolgia, Rinologia e Laringologia*, 1949, lx, Supp. ii, 201.

The author has studied 88 cases of neoplasm in the nasopharynx. Forty-nine are fully reported, as he has had the opportunity of examining the patients as well as the histological material; in the remaining 39 only the latter was available.

Of the 88 cases the tumours were epithelial in 49 and mesodermal in origin in 39. Of the epithelial tumours 41 were differentiated and only 8 were undifferentiated. Squamous-celled carcinomata occurred in 26, that is, more than half the epithelial tumours. The mesodermal tumours consisted of

## Pharynx and Nasopharynx

reticular-celled sarcoma in 24 cases—more than half, the more differentiated sarcomata, such as lymphosarcomata, polymorph-celled tumours and intermediate forms amounting only to 15. There was one case of lymphoepithelioma.

Of the 49 patients who were examined, 27 were epitheliomata and 22 were sarcomata, and the 49 were included in a total of 207 cases of pharyngeal tumours. Thirty-two of the patients were male and 17 female. The sarcomata occurred mostly in patients under 40 years and epitheliomata in those over 40.

In 42 cases the history was monosymptomatic at the beginning, and the organ first affected was the ear in 14 cases, the nose in 11 cases, nerves in 9 cases, and glands in 7 cases. Trismus was the first symptom in one case. Lateral nasopharyngeal tumours were found to invade the cranial cavity by the foramen lacerum, by the foramina ovale and rotundum, and by direct destruction of the greater wing of the sphenoid. The tumours arising in the dome of the post-nasal space spread directly through the sphenoid and ethmoid bones. The various cranial nerves were involved and almost every known variety of syndrome was represented.

The author states that radiography is essential in diagnosis and most helpful, especially the lateral and the submento-vertical views. He says that tomography cannot replace the direct examination, but is often useful in determining the spread of the tumour into neighbouring regions.

F. C. ORMEROD.

*Tonsillectomy and Adenoidectomy, and Poliomyelitis.* ALDEN H. MILLER, Los Angeles. *Archives of Otolaryngology*, 1951, liii, 160.

A survey of the 1,229 cases of poliomyelitis occurring in Los Angeles County during the epidemic year 1949 has been presented, in an attempt to determine whether there is any relationship between a recent tonsillectomy and adenoidectomy operation and (1) the incidence of poliomyelitis and (2) the development of bulbar poliomyelitis, as well as in an attempt to determine whether (3) tonsillectomies and adenoidectomies should be discontinued during the summer months of highest poliomyelitis incidence.

The results of the statistical analysis indicate no clinical or statistical significant deviation between the actual and the expected incidence of poliomyelitis developing in Los Angeles County during 1949 in patients recently tonsillectomized and adenoidectomized, even in the months of July through October. In view of these observations, there seems to have been no reason found to discontinue doing indicated tonsillectomies and adenoidectomies during the summer months.

R. B. LUMSDEN.

*Multiple Plasmocytomata in the Region of the Upper Air Passages.* R. MAURER. *Zeitschrift für Laryngologie, Rhinologie, Otologie*, 1951, xxx, 63.

A short review of the literature is given, The case record follows of a woman aged 52, with plasmocytomata involving the tonsil, nasopharynx and nose. Multiple metastases were present in the clavicle, ribs and cervical and lumbar vertebrae. Treatment consisted in removal of the tonsillar and nasopharyngeal

## Abstracts

growths, and deep X-ray therapy to the metastases. Four years after the appearance of the first symptoms, the patient was sufficiently well to carry out her household duties.  
D. BROWN KELLY.

*Experimental Studies on the Penicillin Treatment of Chronic Tonsillitis.* P. BIESALSKI. *Zeitschrift für Laryngologie, Rhinologie, Otologie*, 1951, xxx, 56.

After a critical discussion of penicillin and sulphonamide treatment in acute tonsillitis, the effect of penicillin in chronic tonsillitis is studied in two series of cases. Histologically, bacteria were found in the crypts, peritonsillar connective tissue and septa; diplococci seemed to predominate. Bacteriologically, no alteration in the condition of the organisms in the crypts could be demonstrated after penicillin or sulphonamide therapy. In the higher penicillin concentrations, the buccal flora showed a tendency to progress towards penicillin-resistant strains.  
D. BROWN KELLY.

### ŒSOPHAGUS

*Œsophageal Foreign Bodies.* GLADYS BOYD, Toronto. *Canadian Medical Association Journal*, 1951, lxiv, 102.

This study of foreign bodies in the œsophagus is based on observations made on 400 cases seen and œsophagoscoped at the Hospital for Sick Children in Toronto during the past twenty-five years. These are divided broadly into "acute" cases, in which the foreign body was removed within two weeks of its ingestion, and "chronic" cases, in which a longer sojourn was recorded. Coins were by far the commonest offenders, followed by safety-pins and buttons; and whereas 86 per cent. of all safety-pins and 75 per cent. of all coins were removed within twenty-four hours, only 57 per cent. of buttons were. Radio-translucency was one common property of foreign bodies that went undetected for long periods. Vomiting and dysphagia were the commonest symptoms in "acute" cases, followed by choking and pain, the latter being of greater significance as the commonest symptom of perforation. The pain was most often felt in the throat, but substernal pain was not uncommon. In "chronic" cases, there was a significant shift from alimentary to respiratory symptoms, such as cough and wheezing, which were present in 50 per cent. of "chronic" cases, but in only 5.2 per cent. of "acute" cases. Œsophagoscopy should not be done until some attempt had been made to localize the object by radiological means. Rapid recovery was the rule with early removal, but gastrostomy was occasionally needed and antibiotics should be used when perforation and infection were present.

J. CHALMERS BALLANTYNE.

### MISCELLANEOUS

*Hearing and Speech Problems in Children: Observations and Use of Electroencephalography.* RICHARD E. MARCUS, Chicago. *Archives of Otolaryngology*, 1951, liii, 134.

Electro-encephalography in sleep has been found to be valuable in the diagnosis of hearing loss and speech defects in young children.

R. B. LUMSDEN.

## Miscellaneous

*Modern Trends of Surgery and Treatment in Otolaryngology.* W. H. JOHNSTON, Santa Barbara, Calif. *Journ. Amer. Med. Assoc.*, 1950, cxliv, 977.

A graph of tendencies in otolaryngology during the past forty years would show many ups and downs, but the writer feels that it is not a dwindling specialty. The use of chemotherapy and antibiotics has greatly reduced the need for mastoid and sinus surgery. Even myringotomy is seldom necessary. The allergic patient is still a real problem. Focal infection is still an important causative factor in systemic disease, and tonsillectomy is still a common operation although largely performed by general surgeons and pædiatricians. There is a wide diversity of opinion about the use of radium applicators for the treatment of excessive lymphoid tissue blocking the eustachian tubes. The trend now seems to be away from the performance of the fenestration operation, although satisfactory results have been obtained in many cases. Bronchoscopy and œsophagoscopy are still frequently performed by otolaryngologists, although the tendency seems to be more for physicians and surgeons to use this procedure.

ANGUS A. CAMPBELL.

*Protein Metabolism in Surgical Patients.* I. S. RADVIN and NICHOLAS S. GIMBEL, Philadelphia. *Journ. Amer. Med. Assoc.*, 1950, cxliv, 979.

Fever and infection hasten protein breakdown, and adequate protein nutrition is essential to all types of wound healing. The capacity to form antibodies rapidly and the ability to provoke normal phagocytosis are dependent on the state of protein nutrition. Many protein functions verge close to the secrets of life itself, for the enzyme systems are protein in nature and are influenced by the state of protein metabolism. All the amino-acids must be present at concentrations greater than the fasting levels for protein synthesis to occur. It is important to integrate caloric intake with protein intake. If adequate non-protein calories are not supplied to the patient, the protein he receives will be used for necessary energy production. In general the proteins of animal origin are superior to the vegetable proteins. Although parenteral feeding has assumed an imposing rôle it has its limitations and the best way to feed a patient is by his mouth. The article has a lengthy bibliography.

ANGUS A. CAMPBELL.

*Some Problems of the Common Cold.* ARTHUR L. BLOOMFIELD, San Francisco. *Journ. Amer. Med. Assoc.*, 1950, cxliv, 287.

The common cold is at the head of the list of unsolved problems in respiratory infections. There is no specific diagnostic test available for this condition. It is a separate virus infection which may be thwarted by the resistance of the host and promoted under certain conditions by exposure to cold. There is no evidence that the true cold is influenced by antihistaminics or antibiotics, and there is no reliable method of prevention. Treatment remains symptomatic. Secondary invasion by ordinary bacteria may be helped by the use of antibiotics. The article has three tables and an extensive bibliography.

ANGUS A. CAMPBELL.