### **ABSTRACTS**

#### EAR

Streptomycin in Treatment of Tuberculous Otitis Media: An Evaluation.

LEON L. TICHE, Tucson, Ariz. Archives of Otolaryngology, 1950, li, 826.

Streptomycin was used parenterally in 32 patients with tuberculous otitis media involving 35 ears, resulting in healing of the perforations in 18 ears (51 per cent.), improvement in 11 (31 per cent.), and no improvement in 6 (17 per cent.). The drug was instilled into the middle ear in the remaining 4 patients, with improvement in 3 and healing of the perforation in the drum membrane in 1. (Author's summary.)

Use of Aureomycin in External Otitis: Comparison with Other Drugs now in Use. WILLIAM K. WRIGHT, Houston, Texas. Archives of Otolaryngology, 1950, lii, 74.

Aureomycin is the drug of choice in treating Ps. aeruginosa infections. Its best form for local treatment is as a powder to be administered after cleaning the ear canal. If symptoms of acute external otitis are so severe as to demand the institution of treatment before culture reports are received, aureomycin by mouth is the drug most likely to be effective.

R. B. Lumsden.

The Nasopharyngeal Radium Applicator in the Treatment and Prevention of Deafness. E. J. Smith and E. E. Schaffe, Montreal. Canadian Medical Association Journal, 1950, lxii, 150.

The authors report their results of irradiation in 50 cases of deafness from various causes, with what they call a "fairly adequate follow-up" on 42. There were 28 cases of Eustachian obstruction, of which 22 were children under 13 7 cases of mixed deafness and 7 cases of chronic suppurative otitis media. They used a 50 mgm. monel metal applicator, applied for 8½ minutes on each side, three treatments being given at intervals of two or three weeks. They state that "when the applicator is used on one side of the nasopharynx, the effect on the opposite side is negligible", yet they have taken no advantage of this for control purposes, despite the fact that no less than 21 of their 22 cases of eustachian tube obstruction in children were bilateral. All cases "except three or four", they claim, "showed some improvement. In some cases the gain was not sufficient to be able to say definitely that it was due to the treatment. However, 55.8 per cent. (of all cases) showed at least a 10 db. improvement for the speech frequencies". This seems a poor criterion of improvement in an essentially variable condition. The authors conclude that irradiation of nasopharyngeal lymphoid tissue has

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a definite place in the restoration of the patency of the eustachian tube and that this is followed "in many cases" by improvement of hearing.

J. CHALMERS BALLANTYNE.

Hearing Defects in Children. LAVELL H. LEESON, Vancouver. Canadian Medical Association Journal, 1950, lxii, 167.

Early training of the deaf child is essential. An artificial aid may be of great value, not only in auditory training but also in preventing the "flat, unintelligible speech of the deaf . . . Only with the hearing of speech is proper imitation of speech possible". The child should be kept "in the realm of home normalcy, to the avoidance of institutionalizing him". The school of Mrs. Spencer Tracy in Los Angeles had shown the necessity and advantages of parent-child training. Heredity, says Dr. Leeson, is responsible for only 25 per cent. of those children born deaf; and he cites rubella in the pregnant mother, birth injuries, quinine, childhood fevers (notably measles), meningitis and suppurative otitis media as responsible factors in the deafness of the other 75 per cent. but adds that "the necessary research into the underlying causative factors of deafness is still in the initial phase".

J. CHALMERS BALLANTYNE.

#### **ŒSOPHAGUS**

Carcinoma of the Upper Thoracic and Cervical Portions of the Esophagus. VERNON J. MAINO and WILLIAM D. SEYBOLD, Rochester, Minn. Proceedings of Staff Meetings of Mayo Clinic, 1950, xxv, 505.

The authors base their article on two cases of carcinoma of the upper thoracic and cervical portions of the esophagus, in which the patients were treated by one-stage esophagectomy and cervical esophago-gastrostomy. Carcinomas of this region are not common and constitute only a small percentage of carcinomas of the œsophagus; the early symptoms are extremely vague and the patient seeks relief only after late manifestations such as dysphagia have developed. Garlock, Sweet and others have shown that lesions of the œsophagus at any level may be removed and the continuity of the alimentary tract re-established by the use of the stomach as a substitute for the œsophagus. Such a procedure has the following features to recommend it: it is relatively simple in that it can be accomplished in a single operation, it is reasonably safe, it is compatible with satisfactory gastro-intestinal function, and it permits resection that is as adequate from the cancer standpoint as any other method. Because of the intimate relationship of the œsophagus to vital structures in the neck and thorax, excision of a wide margin of normal tissue surrounding a carcinoma of the œsophagus is never possible. The preoperative examination should include careful examination of cervical lymph nodes, visualization of the vocal cords, X-ray examination of the thorax, and bronchoscopy to determine whether tracheal infiltration is present—in addition, of course, to the preliminary X-ray examination of the œsophagus and œsophagoscopy mandatory in every case in which early symptoms of a possible esophageal lesion are present.

R. Scott Stevenson.

### Miscellaneous

Corrosion of the Esophagus and Diseases of the Lungs. U. K. KIVIRANTA, Pori, Finland. Acta Oto-laryngologica, 1950, xxxviii, 353.

It is customary to consider bougie perforation and inanition the Scylla and Charybdis of victims of esophageal corrosion. It has been maintained, moreover, that if the patient avoids both of these dangers, he is threatened by a third one of equal magnitude, namely, pulmonary tuberculosis. clinical and follow-up examination of 350 patients, treated during the years 1913-1948 for corrosion and stricture of the œsophagus, revealed that inflammatory diseases of thoracic organs are very common in these patients; in addition to esophagitis and peri-esophagitis immediately associated with corrosion there were also found esophageal diverticula, esophago-tracheal fistulas, mediastinitis, mediastinal abscesses, pleurisy, empyema, pericarditis and pneumonia. As sequelae of these numerous inflammatory diseases the lungs present changes which hitherto have been generally interpreted as tuberculous. True tuberculosis of the lungs was, however, encountered in only one of the 380 patients. Corrosion of the esophagus with its complications is a disease which may easily be mistaken for pulmonary tuberculosis. (Author's summary.)

### **MISCELLANEOUS**

Pharmacological Action of Antihistamine Compounds. J. H. Burn, Oxford. British Medical Journal, 1950, ii, 691.

The pharmacological work which has been carried out on antihistamine compounds in the last few years has shown that these are not highly specialized substances with unusual properties, as has been commonly believed, but that they share properties with well-known drugs like atropine, procaine, quinidine, and pethidine, and that these substances in their turn can exert an antihistamine action. N. K. Dutta compared "histostab" (or "antistin") and "benadryl" with procaine as local anæsthetics, and found that histostab was  $2 \cdot 3$  times and benadryl  $3 \cdot 2$  times as potent as procaine. Many substances used for quite different purposes in medicine and hitherto thought to have quite dissimilar modes of action have many common properties. Among these substances are the antihistamine compounds, and so far as they are concerned they will all cause side-actions. Since benadryl, for example, has properties in common with atropine, we must expect that benadryl will cause some dryness of the month. None of the antihistamine compounds will be free from side-effects in sensitive persons, and they will have many other actions than those in which they obviously antagonize histamine. They can also be used for such purposes as local anæsthetics, as quinidine substitutes for fibrillation, as quinine substitutes for myotonia, for travel sickness, and to relieve pain. The basis of these common properties is that the substances which possess them depress the effects of acetylcholine, histamine, and adrenaline; these substances control activity locally in many tissues.

R. Scott Stevenson.

Non-Epidemic Parotitis. C. A. Adner, Malmo, Sweden. Acta Otolaryngologica, 1950, xxxviii, 333.

The most obvious causes of post-operative parotitis are dehydration and co-existent decreased vitality on account of protein loss, particularly following

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operation on the abdomen and the pelvis. Thanks to present-day methods, which permit excellent control of the fluid balance, and to systematic antibiotic post-operative treatment, post-operative parotitis is on the decline. In the present series of 24 cases reported by the author from an otorhinolaryngological clinic, none of the cases were definitely post-operative; two of the cases occurred after non-specific infections of the upper air-passages, and two after acute tonsillitis. All the ordinary infectious diseases, such as scarlatina, measles, typhoid fever, are occasionally accompanied by parotitis, and in this series parotitis followed measles in two instances. Parotitis also complicated two cases of exacerbating chronic otitis and three cases of acute Acute swelling of the parotid in connection with a stone in the parotid duct did not occur in the present series, though parotid stones are said to occur in from 5 to 10 per cent. of all cases. In this series incision was necessary in only one case; early energetic chemotherapy was beneficial; and favourable results were obtained with local thermotherapy (short-wave, etc.). Oral and dental hygiene and regular control of any dental plates are all-important preventive measures. Some cases are, the author considers, undoubtedly allergic in origin.

R. Scott Stevenson.