# ABSTRACTS

## EAR

*Non-chromaffin Paraganglioma of the Middle Ear.* MALCOLM B. DOCKERTY, J. GRAFTON LOVE and MATTHEW M. PATTON, Rochester, Minn. *Proceedings of Staff Meetings, Mayo Clinic*, 1951, xxvi, 25.

For a number of years it has been common knowledge that there existed in the neck, the mediastinum and abdomen certain " paraganglionic " structures bearing a strong histological resemblance to the well-known glomus caroticum or carotid body. Whereas tumours of the carotid body have been frequently reported in the literature, the existence of similar growths springing from these other paraganglionic elements has been a discovery of recent date. In 1945 H. Rosenwasser described a neoplasm as a " carotid body tumour of the middle ear and mastoid " and suggested an origin from the glomus jugularis, a structure first described by S. R. Guild in 1941, occurring in the form of single aggregate or multiple aggregates of paraganglionic cells situated in the floor of the tympanic cavity just above the jugular bulb and within the temporal bone.

The present writers report a case in which the clinical aspects were those of a brain tumour. A married woman, aged 52, presented herself because of failing vision for the past year, and headache, nausea, vomiting and dizziness for the previous six months. For ten years her left ear had been draining, at first intermittently, then continuously, and nine years previously weakness in the left facial muscles had begun to be noticeable. On examination there was total deafness of the left ear, an obvious left facial palsy, and nystagmus was present. The left tympanic membrane was destroyed, and the middle-ear cavity was filled with material like granulation tissue. X-ray examination revealed destruction of the left petrous ridge and cloudiness in the area of the left mastoid process. A tentative diagnosis was made of a tumour of the left cerebellopontine angle and a left suboccipital craniotomy was performed. The left occipital bone was completely eroded where it forms the floor of the posterior fossa, and a soft-tissue tumour extended out into the suboccipital muscles ; bleeding was very profuse, and at no time was the surgeon able to approach the petrous bone which X-ray had shown to be so markedly involved. The operation was concluded as a subtotal removal of the tumour. In spite of all efforts, the patient died on the eighth day after operation ; no post-mortem examination was obtained. Microscopic examination revealed a picture so similar to that of carotid body neoplasm that the diagnosis of glomus jugulare tumour at once suggested itself. The authors are at present in process of investigating tumours of the middle ear with a view to segregating non-chromaffin paragangliomas which have in the past masqueraded under the diagnosis of polyps, angiomas, and hæmangio-endotheliomas.

R. SCOTT STEVENSON.



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# Ear

*On the Treatment and Diagnosis of Allergic Inflammation of the Ear.* E. RICHTER. *Monatsschrift für Ohrenheilkunde*, 1950, lxxxiv, 310.

The chief allergic inflammatory conditions affecting the ear are eczema of the auditory meatus, middle-ear catarrh, and chronic middle-ear suppuration. In these cases antihistamin therapy is of benefit. Allergic external otitis responds well to dressing with gauze wicks soaked in Antistin. Out of 25 selected cases of chronic middle-ear suppuration, 23 showing a central perforation dried up with combined local and systemic antihistamin treatment. On account of the quick, although unstable effect of antihistamin preparations in the presence of diseased tonsils, removal of such a focus is advised in cases of allergic middle-ear disease.

Out of 10 cases of middle-ear catarrh, response to antihistamin therapy in 6 showed that they were allergic in origin. Blood examination is useful in diagnosing an allergic catarrh. A normal leucocyte count, together with an eosinophilia of more than 4 per cent. suggests an allergic condition rather than one caused by simple mechanical occlusion of the Eustachian tube.

D. BROWN KELLY.

*Melanoma of the Pinna.* A. HAGER. *Monatsschrift für Ohrenheilkunde*, 1950, lxxxiv, 300.

Two cases of primary melanoma of the pinna are described. One patient died from cerebral metastases two years after first being seen at the clinic; radical operation was refused. The second died from broncho-pneumonia 17 days after excision of the auricle. In the diagnosis of the disease, the presence of melanin or melanogen in the urine is conclusive, Thormahlen's test being the best known. Prognosis is always grave owing to rapid extension of the growth, widely disseminated metastases and general toxæmia. Prophylactically, the removal of pigmented nævi is advised, especially if such growths begin to show any alteration in size or appearance.

D. BROWN KELLY.

*Deafness and Kernicterus.* ROY N. BARNETT and CLIFFORD F. RYDER, Norwalk, Conn. *Archives of Otolaryng.*, 1950, lii, 771.

A dreaded late complication of hæmorrhagic disease of the newborn (erythroblastosis fœtalis) is kernicterus, in which there occurs yellow pigmentation of the basal ganglions and certain brain nuclei, associated with severe cell damage, manifested clinically by motor abnormalities and varying degrees of permanent mental retardation. The authors report a case of kernicterus associated with deafness, which, they say, " to the best of their knowledge has never been described as one of the sequelae "—but it may be pointed out that in quite recent months the association has several times been commented upon in medical literature. M. Perlstein (*Amer. J. Dis. Child.*, 1950, lxxix, 605) found deafness to be a common sequel of kernicterus, occurring in about 40 per cent. of cases; Kenneth Hazell, in this journal (1950, lxiv, 720) reported a case in detail, and had likewise failed to find a previous case in the literature; and N. Crabtree and John Gerrard, also in this journal (1950, lxiv, 482) reported a series of 16 cases of perceptive deafness associated with kernicterus, two being completely deaf, and in 14 of them the



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jaundice was due to Rh iso-immunization. The recognition of this added hazard to erythroblastosis fœtalis is therefore becoming more general.

R. Scott Stevenson.

*The Management of Deafness.* Kenneth M. Day, Pittsburg. *Laryngoscope*, 1950, lx, 953.

Considerable progress has been made in the field of audiology in recent years and it should soon be possible to reduce the incidence of congenital hearing defects by the correction of Rhesus incompatibility and by the better control of such diseases as syphilis and rubella in pregnant women. Hearing aids combined with lip-reading and auditory training are now available in several audiology centres and aural rehabilitation clinics, and a further advance is evident in the pre-school training of deaf children and their parents. The fenestration operation for clinical otosclerosis is regarded as one of the greatest otological achievements of the present century. Perhaps the most interesting parts of this paper are the observations of K. M. Day—himself " a severely-deafened otologist "—upon his own personal experiences. He could now hear better and understand more with his present aid than he could 15 years ago, despite the fact that his hearing loss for speech had increased from an average of 50 db. to an average of 85 db. during the intervening years. Regarding the psychology of deafness, he says: " I wasted from five to ten of what should have been the best years of my life as a selfish, depressed and self-pitying young man . . . I was like an ostrich with my head in the sand trying to conceal something which everyone already knew. It was not until I finally accepted my deafness as an unalterable fact and acquired the determination to overcome my handicap that I really began to enjoy life again . . . From my own experience I have learned that the handicap of deafness is about 90 per cent. imaginary. When we cease waiting for miracles and are willing to accept crutches we soon discover that the crutches need not be at all burdensome ". A frank discussion of the patient's problems will often give him greater satisfaction than years of futile treatments.

J. Chalmers Ballantyne.

## TRACHEA

*Tumours of the Trachea.* Paul Holinger, Frank J. Novak and Kenneth C. Johnston, Chicago. *Laryngoscope*, 1950, lx, 1086.

According to various authorities, tumours of the trachea range in frequency from 1 in 300 to 1 in 800 as compared with tumours of the larynx. The authors review 28 cases of these tumours seen at the Research and Educational Hospitals, St. Luke's Hospital and the Children's Memorial Hospital, Chicago. Eighteen of the 28 tumours were primary in the trachea, the remaining 10 invading it from adjacent structures. Five of the tumours were inflammatory and 23 neoplastic, 5 of the latter being benign and 18 malignant. Five of the 9 primary malignant tumours were squamous-celled carcinomata, one was a cylindroma and only one was an adenocarcinoma; there were two myosarcomata. Ten carcinomata of adjacent structures were found invading the



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trachea. Eight of these arose in the thyroid, the other two in the œsophagus. In the later stages of these tracheal tumours, an asthmatoid wheeze developed which was bilateral and so closely resembled asthma that most of the patients had had thorough and repeated allergic studies and treatment for asthma. The first problem in treatment was usually the establishment of an airway and this was often an emergency procedure consisting variously of "coring" of the tumour, removal of obstructive tissue by forceps or snare, and occasionally a tracheostomy. Endoscopic electro-resection and coagulation were important adjuncts to these methods, as also were the implantation of radon seeds and external irradiation. Resection of the trachea was performed in one case of myosarcoma to give a five-year cure, and will undoubtedly assume a more important rôle in the future.

J. CHALMERS BALLANTYNE.

## MISCELLANEOUS

*Communication on Glosso-pharyngeal Neuralgia.* G. E. JANNOULIS and A. M. MEIMAROGLOU. *Monatsschrift für Ohrenheilkunde*, 1950, lxxxiv, 315.

After a short anatomical description, three cases of severe glosso-pharyngeal neuralgia are recorded. In the differential diagnosis between this condition and trigeminal neuralgia, the application of cocaine to the tonsillar region and base of tongue will relieve the pain of the former. Neuralgia of the third branch of the trigeminus can be cured by injection of the branch with novocain. Conservative treatment holds little hope of a permanent cure in glosso-pharyngeal neuralgia. Section of the nerve at the base of the skull is usually required.

D. BROWN KELLY.

*The Treatment of Lupus Carcinoma with deep Extension in the Region of the Nose and Ear.* J. ZANGE. *Archiv für Geschwulstforschung*, 1950, ii, 165.

Extensive and deeply penetrating lupus carcinoma of the nose and face can be removed sometimes with the hope of a lasting cure. Once the disease has invaded the external auditory meatus, or if it has originated in this region, the prognosis is grave. Although appearing relatively small externally, the tumour may have extended deeply into the skull. The deeper regional lymph nodes become involved, a stage recognized by infiltration of the soft tissues between the tip of the mastoid process and the ascending ramus of the mandible.

The treatment advised is complete electro-surgical excision combined with radium therapy. Only those cases in which the tumour had not invaded the petrous pyramid or the posterior cranial fossa were considered suitable for operation. Involvement of the dura or of the internal carotid artery is also a contra-indication to surgery. X-ray treatment is considered useless, as it results in delaying operation and rendering the tissues liable to recurrence of the disease. Three cases are described: two have remained cured, one for eleven years, and the other for four and a half years. The article is illustrated with seven photographs.

D. BROWN KELLY.



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# Abstracts

*Acute Nutritional Disturbance in Young Infants Associated with Mastoiditis.* C. E. SNELLING, D. E. S. WISHART and ALAN BROWN, Toronto. *Canadian Medical Association Journal*, 1950, lxiii, 563.

The authors report 14 cases of " intestinal intoxication " in infants in which mastoidectomy was performed. With the increased knowledge of acid-base metabolism and water balance and with the advent of antibiotics, dehydration and toxæmia are now better treated. The " diarrhœa and vomiting " of infancy has largely lost its place as a major problem, but certain cases are still resistant to treatment. In the cases reported, despite the usual methods of hydration supplemented by antibiotics, the toxæmia remained or became worse and the digestive disturbances continued. Mastoidectomy was performed on one or both ears according to the clinical signs and was followed by improvement in all but two cases. Dr. Wishart describes the otological picture found in these cases. In the usual mastoiditis there has been a period of otitis media, with aural discharge, the auricle becoming displaced later from extension of the infection through the outer table of the bone. In the type of case under consideration, the picture is atypical in that evidence of extension through the bone is lacking. The child is not reacting to treatment and is obviously getting worse. The ears do not appear normal. Because no other cause can be found to explain the lack of improvement, the mastoids are explored. A thorough mastoidectomy should be performed in every instance for, although simple antrotomy may suffice in certain cases, pneumatization may be considerable even in infants and autopsy has occasionally shown that this procedure has failed to drain an important pocket of pus. Exploratory mastoidectomy should not be performed in the absence of symptoms and signs of otitis media. Full case reports are presented.

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