

## ABSTRACTS

### EAR

*A Critical Consideration of the Various Methods of X-ray Examination of the Temporal Bone.* GEORG VÖLGER. (*Acta Oto-laryngologica*, Vol. v., fasc. 1.)

This paper includes a somewhat detailed account of the history of the subject with descriptions, illustrated by photographs, of the various methods advocated by those who have developed the technique of radiography of the temporal bone. In comparing the relative advantages of the different directions in which the rays are made to pass through the bone, the writer suggests that the method to be selected depends, in any given case, upon the special points which require investigation; that no one direction of radiation is suitable for all purposes; and that it is usually well to employ several. This is the case even in radiography of the nasal accessory sinuses, in which the anatomical difficulties are much less formidable. He believes that, given a careful adaptation of the method to the case, and the requisite experience and skill in interpreting the skiagrams, radiography may be expected to yield as valuable results in diseases of the temporal bone as in those of other regions of the body.

The paper concludes with good reproductions of a number of interesting radiograms and references to seventy-four articles dealing with the subject.

THOMAS GUTHRIE.

*On the Arm Tonus Reaction.* E. WODAK (Prague), M. H. FISCHER (Prague). (*Zeitschrift für Hals. Nasen., etc.*, Bd. iii., p. 215.)

Fischer's reaction, the A.T.R. described by Wodak and Fischer (*Münch. Med. Woch.*, No. 6, 1922) is obtained experimentally when, with the eyes closed and the arms held straight out in front, one ear is subjected to cold irrigation. The arm of the same side sinks as if heavier, while that of the opposite rises as if lighter. With warm irrigation the opposite occurs. During rotation to the right, the left arm sinks, and on stoppage, the reverse. Galvanisation with the anode acts like cold irrigation, and with the cathode like warm. One degree centigrade above or below normal is said to be sufficient to induce the reaction. It is suggested that warm irrigation or cathodal galvanisation stimulates. (Cold or anodal inhibits.) Experimental weighing of the sunken arm shows an actual increase in weight (accompanied by a feeling of warmth) attributable to a change in the vascularity of the part through the action of the vaso-constrictor centres. The A.T.R.

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may occur spontaneously, independently of the labyrinth. Thus, in some diseases of the cerebellum, especially tumours, sinking of the one arm, along with loss of capacity for judging of weight, have been observed. This may in some cases be corrected by appropriate irrigation, *i.e.* warm on the dropping side. In other cases, such correction cannot be effected. Clinically, the spontaneous A.T.R. of the non-correctable type has been observed in cerebellar tumours or diseases causing pressure on the cerebellum. Spontaneous A.T.R. of both types has been found in other diseases of the central nervous system such as multiple sclerosis, as also in manifest peripheral affections of the vestibular nerve itself. Experimental A.T.R. is recommended as of value in clinical diagnosis.

JAMES DUNDAS-GRANT.

*The Behaviour of Psychical Traumatic Deafened Patients when tested with the Whispered Voice.* O. MUCK, Essen. (*Zeitschrift für Hals- Nasen- und Ohrenheilkunde*, Bd. ii., p. 255, 1922.)

The utmost distance at which the patient can hear the voice having been ascertained, numbers are whispered from just beyond that distance from two to four times, the same number at intervals of four or five seconds at the same distance. In the psychical cases it is found that the number is correctly repeated only after it has been given several times; on the other hand, in organic cases, as soon as the distance is short enough for the word to be heard, it is repeated at once but almost invariably incorrectly.

JAMES DUNDAS-GRANT.

*On the Diagnosis of Unilateral Deafness.* H. G. RUNGE, Jena. (*Zeitschrift für Hals- Nasen- und Ohrenheilkunde*, Bd. ii., p. 265, 1922.)

The difficulty of shutting out the hearing of the good ear is found practically insurmountable, and it is very easy to overlook the minor residua of hearing power in the deafened side. The noise machine of Bárány or the compressed air stream of Voss employed in the good ear, has a tendency to deafen still more the bad one; hence the risk of overlooking minute residua of hearing in the latter. When the good ear is one in which the radical operation has previously been performed, it appears to be impossible to shut out hearing even by means of the noise machine for the detection of the residua in the other ear. These conclusions were arrived at by the endeavour to exclude the hearing of both ears together by means of a deafening apparatus in each.

JAMES DUNDAS-GRANT.

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*Complete Traumatic Destruction of Vestibular Function with unusually Slight Coincident Cochlear Involvement.* DR FIELDS. (*Laryngoscope*, vol. xxxiii., No. 1, p. 16.)

The author states that it is now well established that lesions resulting from aerial concussion are rarely characterised by absolute and permanent deafness, and that there is only exceptionally an involvement of the vestibular apparatus, while lesions resulting from direct injury show, in addition to pronounced cochlear manifestations, a coincident affection of the vestibular structure.

The case described is one of direct injury which was followed by unconsciousness and later vertigo. On examination, a fortnight after the injury, the hearing was only slightly diminished and was of the inner ear type; a whisper could be heard at twelve feet. The rotation and caloric tests, however, elicited no response on the side of the injury. The author concludes that the static labyrinth took the brunt of the blow, while the cochlea escaped.

ANDREW CAMPBELL.

*Vestibular Investigations after the Removal of one Cerebral Hemisphere in the Rabbit.* DUSSER DE BARENNE, Utrecht, and A. DE KLEYN, Utrecht. (*Zeitschrift für Hals- Nasen- und Ohrenheilkunde*, Band iii., p. 197, 1922.)

After the removal of one hemisphere—say the right—the following observations were made:—

1. Simultaneous cold or warm irrigation of both ears produced no nystagmus (normal negative response).
2. The right-sided nystagmus following (1) rotation to the left, (2) cold irrigation of the left ear or (3) warm irrigation of the right is stronger than nystagmus induced by similar methods to the left.
3. In some of the rabbits in which the right labyrinth was also destroyed, nystagmus after rotation to the left was stronger than after rotation to the right, in spite of the loss of the right labyrinth. (This is the opposite of what takes place when the right labyrinth is extirpated without removal of the right hemisphere, showing the preponderating influence of the cerebral hemisphere.)

JAMES DUNDAS-GRANT.

*Is there a Fronto-pontile-cerebellar Path?* VOSS, Frankfurt-am-Main. (*Zeitschrift für Hals- Nasen- und Ohrenheilkunde*, Band iii., p. 191, 1922.)

The writer investigated a case in which a wound in the left frontal region involved the removal of a considerable area of the frontal bone. The most marked reaction was past-pointing with the right hand

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outwards when the boneless area was cooled with chloride of ethyl. On the strength of these and other associated tests Voss sees no escape from the view that there is a fronto-pontile-cerebellar path.

JAMES DUNDAS-GRANT.

## LARYNX

*Cancer of the Larynx, Is it preceded by a recognisable Precancerous Condition?* CHEVALIER JACKSON, M.D. (*Annals of Surgery*, vol. lxxvii., p. 1., Jan. 1923.)

The author discusses at length various laryngeal conditions which he believes to be precancerous, defining the word as any histologically abnormal condition intervening between the normal and the cancerous. He lays stress on the view that repeated injury and long continued irritation and inflammation are potent causes of cancer. His views are illustrated by reports of four cases.

The following are his conclusions:—

1. From a clinical point of view we may regard continual laryngeal irritation from any cause, chronic laryngitis, keratosis, syphilis, pachydermia, so called prolapse of the ventricle and benign growths, occurring in a person of cancerous age, as clinically precancerous, in the sense that they may be contributory factors in the etiology of cancer.

2. It is no argument against this life-saving rule to contend that these conditions are too rarely predecessors of cancer to justify regarding them as etiological factors in cancer. There is no known agent causative of any disease that will always, in all individuals, under average conditions of exposure, produce that disease. The human race would be extinct if such were the case.

3. The time has come for the laryngologist to follow the lead of the general surgeon and the gynæcologist in the recognition of the necessity of curing cancer before its commencement.

4. There will be fewer deaths from laryngeal cancer when every member of the medical profession fully realises the frequently malign nature of chronic hoarseness.

J. ARNOLD JONES.

*On the Question of Voice-building in Singers.* L. D. RABOTNOW, Moscow. (*Zeitschrift für Hals- Nasen- und Ohrenheilkunde*, Vol. ii., p. 322, 1923.)

Rabotnow dwells particularly on the necessity of good apposition of the vocal cords, in their cartilaginous as well as their membranous portions, for the prevention of the escape of air, which he considers to be the chief cause of vocal insufficiency. He reminds us again

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that old Italian singers were accustomed to hold a lighted candle before the mouth in order to demonstrate that while they were singing there was not sufficient escape of air to set the flame in motion. He considers that in defects of voice-production there is very frequently this gaping of the interarytenoid portion of the glottis, even when it cannot be seen by means of the laryngoscope. He resorts, therefore, to comparative anatomy, and tells us that in the mammals this opening is always present, hence possibly the unmusical nature of their voice. A certain amount of gaping is also seen in tracheotomised patients when the cords are inspected from below. By means of an appropriate face-piece and Marie tambour communicating with a revolving smoked cylinder, he finds that during the utterance of certain vowels, such as *U* and *i* (German), there is a greater escape of air than with other vowels, and he advises that in cases of vocal defect with escape of air (what we term "breathiness"), the singer should practise with this instrument and control his voice so as to have as little irregularity in the tracing as possible. He attaches importance to the action of the inferior constrictor of the pharynx, which is inserted into the posterior margins of the thyroid, and, by its contraction, pulls these together so as to assist in the closing of the glottis.

JAS. DUNDAS-GRANT.

*Laryngeal Paralysis associated with the Jugular Syndrome and other Syndromes.* GORDON B. NEW. (*The American Journ. Med. Sciences*, Vol. clxv., No. 5, May 1923.)

New mentions that Hughlings Jackson, in 1864, first described complete unilateral laryngeal paralysis associated with paralysis of the soft palate, tongue, trapezius, and sternocleidomastoid muscles.

Since the lesion occurs in the neighbourhood of the jugular foramen it has been called the jugular foramen Syndrome of Jackson. There is no mention, New says, of loss of taste on the posterior third of the tongue in Jackson's original description.

Mackenzie, in 1883, reported a similar group of paralyse associated with a syphilitic lesion of or near the medulla.

The Great War has accounted for many instances of the syndrome.

New records seven cases whose ages varied from 35 to 62 years. In all, except possibly one, the syndrome was due to neoplasm in the region of the jugular foramen involving the 9th, 10th, 11th, and 12th nerves. In four the tumour was of a low grade of malignancy, the duration of symptoms varied from two to twelve years. Of these four cases, one was a carcinoma of the mixed tumour variety—two were clinically mixed tumours of the parotid gland, and one a recurring basal-celled epithelioma of the right cheek.

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In two cases the pathological lesion was a rapidly-growing tumour, probably a lymphosarcoma, involving the structures around the jugular foramen.

In two cases, one due to basal-celled carcinoma and the other a rapidly-growing sarcoma, several other cranial nerves were involved.

The cervical sympathetic nerve was involved in four cases, as shown by myosis and narrowing of the palpebral fissure. It was noticed that hemiparesis of the tongue caused difficulty in swallowing fluids, whilst paralysis of the pharynx interfered with the swallowing of solids.

New points out that the syndrome due to involvement of the last four cranial nerves and the cervical sympathetic nerve in the region of the jugular foramen is quite unusual. It is usually due to the extension of a neoplasm, although a tuberculous process in the neck or an acute phlegmon may be the cause.

A good bibliography of the subject is appended.

F. HOLT DIGGLE.

### MISCELLANEOUS.

*The Effects of Antiseptics on the Bacterial Flora of the Upper Air Passages.* A. L. BLOOMFIELD. (*Bulletin of Johns Hopkins Hospital*, Feb. 1923.)

The treatment of "carriers" by vaccines has proved so disappointing that numerous attempts have been made to eliminate organisms from the nose and throat by local application of antiseptics, such as chloramine T, which was used in the British Army for treatment of meningococcus carriers. In order to determine the value of such antiseptic applications, the writer conducted a series of experiments on normal healthy subjects. Swabs were taken before and after the application, and quantitative and qualitative changes in the bacterial flora were noted. In no case was it possible to completely sterilise the experimental area, and it was apparent that, unless the entire mouth could be sterilised, conditions would promptly return to their previous state within a short time after the application.

Even such a drug as mercurochrome, which penetrates to such an extent that the mucous membrane retains the red colour for over twenty-four hours, produced no alteration in the bacterial flora.

Bloomfield suggests that it is possible that the beneficial effect of antiseptics is due to the irritation, hyperæmia, or ischæmia caused by the drug.

DOUGLAS GUTHRIE.

*Remarks on Boeck's Sarcoid, with Special Reference to its Occurrence on Mucous Membranes.* C. HVIDT. (*Acta-Otolaryngologica*, Vol. v., fasc. 1.)

Since the dermatologist Boeck, in the year 1899, first described the disease known as Boeck's sarcoid or "benign military lupoid"

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nearly 100 cases have been reported ; and, although a very pronounced and obstinate affection of the mucous membranes—especially the nasal mucous membrane—is present in more than 50 per cent. of the cases, the disease has received scarcely any attention from rhinolaryngologists.

The disease, which may develop primarily in the mucous membrane, presents itself either as a diffuse infiltration or as small or large nodules in the nose, mouth, pharynx, or larynx. The infiltrations are bolster-shaped, with rather uneven surfaces, brownish in colour, and of hard consistency, usually on the septum, the floor of the nasal cavities and the posterior wall of the pharynx. The nodules are miliary, yellowish-brown with narrow red margins, and appear either singly or in small groups whose centre is somewhat depressed. The consistency is almost as hard as cartilage, and it is characteristic that neither ulceration nor scar tissue is ever found. Subjective symptoms are slight and sometimes entirely absent.

The histological appearances of the disease in the skin, the lymphatic glands and the mucous membranes are essentially the same, and consist of clusters of epithelioid cells containing some giant cells without necrosis or local reaction.

The author describes a case observed by himself and discusses the nature and cause of the disease.

THOMAS GUTHRIE.

*Tracheotomy with the help of a Mandarin.* MM. HALPHEN and AUBIN. (*Archives Internationales de Laryngologie, etc.*, May 1923.)

The authors describe a technique advisable in certain cases calling for tracheotomy which, though propounded several years ago by Sebileau and Lemaître, has not to their knowledge been described elsewhere.

The cases suited for this method are those of new growth of the thyroid gland or adjacent cervical region, in which the trachea has been subject, not only to compression and stenosis, but to actual displacement.

The “Mandarin” is an ordinary bronchoscopic tube which is passed through the larynx into the trachea under cocaine anæsthesia. It serves the double purpose of straightening and distending the collapsed walls of the trachea and also of providing a safe means of administering a general anæsthetic for the actual tracheotomy, which in such cases may be difficult, but which in the new conditions can be carried out in comfort.

After bleeding points have been secured, the trachea is incised and the bronchoscopic “Mandarin” withdrawn ; dilators are inserted and the tracheotomy tube is placed in position.

J. B. CAVENAGH.