

ABSTRACTS

NOSE AND ACCESSORY SINUSES.

On the Local Treatment of Lupus Vulgaris of the Nose and Larynx by Electrocoagulation. AXEL VIBEDE. (*Acta Otolaryngologica*, Vol. v., fasc. 1.)

This paper contains the results of the treatment at the Finsen Light Institute, Copenhagen, of 193 cases of lupus of the nose and throat by means of diathermy, either alone, or combined with the Finsen bath. About 82 per cent. were apparently cured, while Reyn's electrolysis gave only 50 per cent. of apparent cures. Diathermy has the advantages over electrolysis in that the treatments are few in number (on an average two sittings for each patient) and of short duration, and large doses of iodine are avoided. Its disadvantages are the cost of the apparatus; the difficulty of limiting deep-seated action and the inefficiency of local anæsthesia. Deep-seated destruction can be best avoided by using as powerful a current as possible during the shortest time possible. Local anæsthesia is of no use since the nerves in the surrounding tissues are affected both electrically and thermally far beyond the area under treatment. When, however, the treatment is of short duration, most patients tolerate it quite well without general anæsthesia; otherwise a light general anæsthesia is quite sufficient. In two cases secondary hæmorrhage occurred at the end of a fortnight, but was easily arrested by pressure.

THOMAS GUTHRIE.

Seasonal Hay Fever. J. H. BLACK, M.D., and ANNETTE BLACK, Dallas, Texas. *Amer. Med. Assoc. Journ.*, vol. lxxix., No. 26, 23rd December 1922.

The treatment of hay fever in Texas is discussed. The majority of the series of 100 cases was of the autumnal variety and treated with ragweed pollen. The authors claim no complete cures but they obtained various degrees of improvement in all. The intradermal injection of the pollen is advised. In testing, they state that only twelve out of ninety cases had escaped intranasal operation, but in no case was the hay fever benefited.

P. G. GOLDSMITH.

Radiographic Aspects of Nasal Accessory Sinus Suppuration. W. UFFENORDE, Marburg. (*Archiv. für Ohren-, Nasen- und Kehlkopfheilkunde*. 110 Band, 2/3 Heft.)

In a lengthy contribution, illustrated by five diagrams, Uffenorde states that the presence or absence of air *per se* is almost a negligible factor in the interpretation of X-ray photographs of the nose and

Abstracts

accessory sinuses. For example, the normal variation in the shadow of the ethmoidal labyrinth is a question not of air content, but of density and thickness of bone. He has found that neither occlusion of existing air-spaces with fatty tissue nor introduction of an inflated indiarubber ball under the forehead appreciably modifies the shadows. Experiments with hollow aluminium cubes lined with various materials, references to ventriculography, and other data lend further support to his thesis.

A suspicion that skiagrams often fail to reveal an early inflammation of an accessory sinus until its bony walls participate in the process has been strengthened in several instances by the subsequent appearance of "veiling." Conversely, positive findings in healed sinusitis are probably due to persistent sclerosis: even a chronic dacryocystitis has on the neighbouring bone an effect which is demonstrable by X-rays. Clinically, the doctrine that bone plays no part in a typical sinusitis is unimpeachable, but X-rays are concerned with physio-chemical rather than morphological conditions. Uffenorde is a strong advocate of soft tubes. He points out that in radiography of the chest a soft tube is necessary to demonstrate a foreign body such as a bean. Naturally, it is impossible in the same plate to distinguish the vertebral outlines in the dense undifferentiated shadow of the spinal column: for this purpose more penetrating rays from a harder tube are essential. The same laws apply in radiography of the facial bones. In order to obtain detail, the softest tube which will give the requisite penetration should be selected. An alternative plan is to allow a gas-filled tube of the Müller type to harden progressively, or to alter the current passing through the Coolidge tube, during the exposure.

W. OLIVER LODGE.

Optic Nerve in Sinus Disease. Dr C. W. CUTLER. (*Laryngoscope*, Vol. xxxii., No. 8, p. 576.)

At the edge of the blind spot, the first or marginal visual cells of the retina are connected with the peripheral fibres of the optic nerve. These fibres lie next to the sheath, which is in contact with the posterior ethmoidal and sphenoidal sinuses. Any pathological process will involve the peripheral fibres and is manifested by the production of a peripapillary scotoma (van der Hoeve's sign). The enlargement of the blind spot is therefore one of the most important early signs of sinus neuritis. The occurrence of a central scotoma is not the rule in sinus neuritis, although it is found occasionally at an early stage. Van der Hoeve and de Kleyn examined 59 cases of posterior ethmoiditis and sphenoiditis, and found the enlarged blind spot in 54. It may exist as the only defect in the visual field for a long time, and does not necessarily indicate radical operative measures, though the patient should be carefully watched.

ANDREW CAMPBELL.

Larynx

LARYNX.

The Healthy Epiglottis in Laryngectomy. KARL KOFLER. (*Wiener Klinischer Wochenschrift.*, 4th January 1923.)

From Billroth in 1873 onwards, it has been a common practice to leave the healthy epiglottis in the operation of otherwise complete laryngectomy. Maas, in 1876, advised removal because the epiglottis has no function in deglutition proper.

In a number of cases reported by Sendziak in which the epiglottis was left, either difficulty in swallowing or recurrence of the growth occurred in over 50 per cent. of cases.

There is at present much difference of opinion as to whether it should be removed, and Chiari in his large experience had no settled practice. The author relates a case of his own in which the epiglottis was left, with the result that swallowing of solids was impossible and of fluids difficult. Removal of the epiglottis completely relieved this complication.

The author considers that the epiglottis should inevitably be removed, as after extirpation of the larynx it is a useless organ.

F. C. ORMEROD.

The Diagnosis of Syphilis of the Larynx. JOSEF BUMBA, Prague. (*Zeitschrift. f. Hals-, Nasen-, und Ohrenheilkunde*, Bd. II., p. 273, 1922.)

The writer is of the opinion that cases of syphilis of the larynx are often overlooked as such, owing to the observer failing to think of syphilis; this obviously takes place more frequently with patients of higher social rank than in hospital patients. He, therefore, strongly advises the taking of the Wassermann reaction in all uncertain cases, remembering, however, that even a negative result does not always exclude a diagnosis of the disease, which is of such enormous importance. The ulcerative conditions are generally perceptible enough, and when recognised can generally be successfully dealt with. The hyperplastic changes are, however, of greater importance and lead to stenosis and tracheotomy. In regard to treatment, he utters a warning against the use of iodine preparations in the cases of stenosis, and recommends in them the immediate administration of salvarsan or one of its substitutes. He comes to the conclusion that in many cases the diagnosis of syphilis of the larynx might have been made years in advance, if the physician in charge had only thought of its possibility.

JAMES DUNDAS-GRANT.

A New Method of Hypopharyngoscopy. A. BRUGGEMANN (Giessen). (*Zeitsch. f. Hals-, Nasen-, und Ohrenheilkunde*, Band IV., p. 169.)

The conical portion of the cricothyroid membrane is transfixed from side to side through the skin with a strong needle by which a thick

Abstracts

silk thread is drawn through. By means of this thread the larynx can be drawn forwards and the open hypo-pharynx can be inspected by means of the laryngeal mirror in "Killian's position." The skin is first sterilised with iodine, then a half per cent. solution of novocain is injected on each side. This is said to make the proceeding quite bearable. The method is available for both indirect and direct inspection, and also for the passage of the œsophagoscope.

JAMES DUNDAS-GRANT.

The Treatment of Laryngeal Tuberculosis by means of the Röntgen Rays.

L. RICKMANN. (*Münch. Med. Wochenschrift.*, No. 45, Jahr. 69.)

The author in his capacity as physician in charge of the pulmonary sanatorium of St Blasien has treated 61 cases of laryngeal tuberculosis by means of X-rays. The great therapeutic worth of this form of therapy lies in its power of inducing cicatrisation and in helping and hastening this tendency when it is in abeyance. If used in suitable cases and with proper technique, the effect is towards cicatrisation and natural healing, and hence it is inappropriate in the exudative and acute destructive processes.

It is principally indicated in the proliferative forms of laryngeal tuberculosis, especially in those cases of subepithelial tubercle which, by reason of the circumscribed hyperæmia or tubercle formation, may be recognised macroscopically. It is also indicated in tubercular small-celled infiltration of the submucous tissue, when there is papillary, epithelial, or deep connective tissue proliferation.

The law that tuberculous granulation tissue is elective to the action of the hard rays applies to the larynx as to other regions. We should strive to provoke just enough reaction to act as an incentive to cicatrisation, and not to cause destruction of tissue. This reaction can and should be induced by a dosage which has no effect on the surrounding tissues.

The writer describes his technique as follows: The larynx is radiated every second day with 8.10 X, the equivalent of 20 to 30 per cent. of the H.E.D. The radiation is carried out by means of the symmetry apparatus of Reiniger, Gebbert, and Schall, and the self-hardening tubes of Müller-Schnellseide. The focal skin distance is 24 cm., and the size of the field 4 cm. diameter. An aluminium filter of 4 mm., a current strength of $1\frac{1}{2}$ to 2 milliampères and a Bauer quantity meter of 7.8 are employed. The structure of the neck makes it possible to radiate the larynx from the front and from both sides simultaneously, in such a manner that the central rays are certain to traverse the tubercular focus. As the latter is at the most 3 to 5 cm. from the cutaneous surface, the rays lost by absorption and dispersion are relatively small. After six exposures there is a pause of at least three weeks, the radiation being eventually repeated under the strictest clinical observation. It must, however, be noted that the optimal

Larynx

dosage, as also the number and the sequence of the sittings, must be determined in each individual case. The anatomical character of the lesion is the decisive factor. Benevolent proliferative infiltrations can bear three sittings each with 20 to 30 per cent. of H.E.D. weekly, whilst ulcerative conditions demand smaller doses and longer intervals. The greater the development of œdematous swelling, the more carefully must the treatment be applied. The writer is decisive in his denunciation of destructive doses in treating this affection, and points out that this treatment must still be considered to be in its developmental stage.

JAMES B. HORGAN.

Fatal Injury following Röntgen Radiation of the Larynx.

V. HÖFMEISTER. (*Munch. Med. Woch.*, No. 49, Jahr. 69.)

The occurrence of three fatalities within eleven months as a direct result of X-ray treatment of laryngeal tumours has induced the author to publish at some length the histories of these cases. In each case the patient was an adult past middle age. One suffered from papilloma which had twice previously been removed by operation. The second case was diagnosed as lupus-carcinoma still in the operable stage, whilst the third case suffered from a large partially ulcerating carcinoma of one ary-epiglottic fold. The radiation was in each case carried out in a manner conforming to the generally accepted principles at present governing this form of treatment. Full clinical post-mortem macroscopic and microscopic records of the cases are given and the author's conclusions may be briefly summarised as follows:—

Late injury as a result of Röntgen radiation of the larynx are of more frequent occurrence than was thought.

The absence of a severe reaction within the first four weeks after radiation does not prove that the dose was not excessive. Even in cases where a single dose has been well borne at the time of administration death may eventually ensue.

Considering the uncertainty and danger of the method, no case of operable carcinoma or papilloma should be treated by radiation. Experimental radiation is absolutely contra-indicated, because the secondary tissue sclerosis caused by the rays renders a subsequent operation impossible.

JAMES B. HORGAN.

MISCELLANEOUS.

The Prophylaxis and Therapy of Bronchial Asthma with Concentrated Solutions of Calcium Chloride. SCHLIACK. (*Munch. Med. Wochenschrift.*, No. 13, Jahr. 70.)

The writer defines bronchial asthma and hay fever as "vegetable neuroses" due to a congenital or acquired perversion in the stabilising relationship between the antagonistic nerve groups, vagus and sympathetic.

Abstracts

This is probably initiated by a lowering of the calcium content as a result of excessive calcium destruction from disturbances of the internal secretions. By the administration of large amounts of calcium it is possible, for a longer or a shorter period, to increase the calcium content of the blood and to remove for such period the results that accrue when the nervous system is starved of calcium.

The amount of calcium administered must be sufficient to both raise and maintain the total calcium content above the danger limit for the diseases in question, otherwise relapses will occur. The most appropriate calcium salt is calcium chloride (CaCl_2), but it has such a disagreeable taste that it could not be taken continuously in efficient dosage. In "Repocal" we possess a preparation which has a high percentage of calcium chloride, is devoid of unpleasant taste and is easily taken. It consists of an emulsion of calcium chloride with milk fat and white of egg suitably flavoured. It contains 12.5 per cent. of calcium chloride by weight.

Repocal is given in doses of a tablespoonful every two hours in half a glass of milk or water. In this way eight doses or the equivalent of 20 grammes of calcium chloride are given daily. The average dose in cases of medium severity is four to six spoonfuls (10 to 15 grammes of CaCl_2) daily. By means of Repocal the asthmatic attacks are either completely checked or else much ameliorated.

If given during an attack, Repocal is effective in restoring the normal stabilising relationship between the vagus and sympathetic which has been upset by pathological irritation of the vagus. In these circumstances the writer also administers atropine and adrenaline.

JAMES B. HORGAN.

REVIEW OF BOOK

Brain Abscess, its Surgical Pathology and Operative Technic. By WELLS P. EAGLETON, M.D., Newark, N.J. Pp. 297; 40 illustrations. The Macmillan Co., New York.

The author's aims in practice and in writing this interesting monograph may be stated briefly as follows:—

1. To apply the technique, elaborated by Cushing for aseptic brain operations, to the exploration of the cranial fossæ for meningeal or brain abscess.

2. To examine fully all physiological, mechanical and pathological facts which bear on the prevention, evolution and eradication of brain abscess.