ABSTRACTS

NOSE AND ACCESSORY SINUSES

A Simple Bloodless and Painless Operation for the Complete Exenteration of the Ethmoid Labyrinth. Dr HAROLD HAYS. (*Laryngoscope*, Vol. xxxi., p. 186.)

Under local anæsthesia induced by cocaine infiltration directly into the ethmoid cells, Dr Hays makes an incision above the middle turbinal. He applies a chisel to the anterior end of the incision, and drives it backward till it touches the sphenoidal wall. The mass is pushed downward and snared. There is no pain, no bleeding, and the author has used this method in over 100 cases.

ANDREW CAMPBELL.

The Relation of Naso-pharyngeal Malignancy to other Diagnoses. G. B. WEIR. (*Collected Papers of Mayo Clinic*, 1920.)

The lack of nasal symptoms in malignant disease of the naso-pharynx is surprising, and even if a routine examination is made, a small growth in this region may escape observation. At the Mayo Clinic, during the past four years, forty-six cases have been studied. In only twenty-four of these were nasal symptoms present; nasal obstruction in nineteen cases, recurrent bleeding in three cases, nasal discharge in two cases. Eye symptoms (diplopia, dim vision, ptosis, etc.), were noted in ten cases. Eleven of the patients complained of earache, and seventeen suffered from headache, or pain in the neck and jaw. Enlarged cervical glands were present in thirty-two of the patients, eleven of whom had undergone operation for removal of the glands, without the primary focus being found. Six had nasal operations, apparently without discovery of the malignant growth. One patient underwent operation for pituitary tumour, which was found at necropsy to be a direct extension into the sella turcica of an epithelioma of the naso-pharynx. Several cases are reported in detail.

DOUGLAS GUTHRIE.

The Deviated Septum and its Correction in Young Children. G. J. ALEXANDER. (*Journ. of Ophth., Otol. and Laryngol.*, Sept. 1921.)

Alexander affirms that developmental deformities of the nasal septum generally make their appearance a year or two before the second dentition, despite St Clair Thomson's statement to the contrary.

When catarrh, alar collapse, mouth breathing, high arched palate and irregular dentition depend upon intra-nasal obstruction, mere removal of adenoids is not enough. Alexander believes that sub-

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mucous resection is the best operation, as in adults; he therefore practices it under general anæsthesia, contriving to overcome the technical difficulties.

Whilst denying that the delicate septum has any effect upon the development of the massive osseous walls of the nose, he is careful to leave adequate cartilaginous support anteriorly. In a number of cases observed over a period of five years, the results have been excellent, and in no instance has the growth of the nose been impaired

WM. OLIVER LODGE.

Malignant Granuloma of the Nose. Sir ROBERT WOODS. (*Brit. Med. Journ.*, 16th July 1921.)

Two cases are described presenting a spreading ulceration of the nasal passages with destruction of the septal cartilage and the formation of fetid glutinous crusts. In both cases the Wassermann reaction was repeatedly negative and anti-syphilitic remedies failed. The condition extended in both cases to the soft palate with perforation. In the second case necrosis of the superior maxilla occurred, while in the first the nasal bridge became depressed. The first case had no pain, but the second required anodynes, and had to move about very cautiously to avoid jarring. Specimens removed for examination showed granulation tissue to be the dominant feature, but in one place at least (in case 1) it had developed into something very like a sarcoma. X-ray treatment of the first case failed, and the patient died after $4\frac{1}{2}$ years, but radium treatment of the second case gave an excellent result. There was a slight recurrence after six months, but that yielded to a further exposure.

T. RITCHIE RODGER.

A Case of Acute Frontal Sinus Suppuration followed by Multiple Frontal Lobe Abscesses. R. GRAHAM BROWN. (*Medical Journal of Australia*, 15th October 1921, Vol. ii., p. 313.)

The patient, a man aged 24 years, displayed well-marked signs and symptoms of left sided acute frontal Sinus disease.

Partial middle turbinectomies, and intra-nasal enlargement of fronto-nasal ducts on both sides. Three days later the patient's condition was much worse. A radical operation—removal of the floor and contents of frontal sinus—was performed. 10 c.c. of pus under pressure escaped. Excellent view of posterior and anterior walls was obtained. No necrotic area on posterior wall was seen. Two days later, slight blurring of right optic disc and patient became drowsy. Two weeks later he complained for the first time of pain in the head and vomited. Condition fluctuated; was allowed out of bed. Twenty-fifth day after first operation, sudden onset of right-sided hemiparesis. Seven weeks after first operation, definite signs

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of intra-cranial pressure. X-ray operator advised that there were signs of multiple abscesses of frontal lobe.

When trephined over frontal region—45 c.c. of greenish yellow pus escaped after incising the dura and brain substance to a depth of 1.2 cm. to 3 cm. Patient died suddenly three months after first operation. *Post mortem.* Three abscess cavities were found bounded by thick tough capsules which suggest that the abscesses were present when the patient was first seen. A. J. BRADY.

Cause of Failure of the Radical Operation on the Frontal Sinus. THOS. J. HARRIS, M.D., New York. (*Journ. Amer. Med. Assoc.*, Vol. lxxvii., No. 15, 8th October 1921.)

This is a review of the various external operations for the cure of chronic frontal sinus disease, and a consideration of the failure that so often ensues. Following Killian's publication of his external operation, specialists thought they had at last reached a method by which a cure would always follow, but Harris says a wave of disappointment at the operative results seems to have taken place. Inability to relieve pain and discharge signifies failure.

Lothrop's operation is very favourably considered. It differs in principle from the other external operation in that obliteration of the sinus is not sought but rather restoration of function by removal of diseased tissue and the establishment of thorough and permanent drainage. Intra-nasal and most external operations are followed by narrowing of the communication between the nose and the frontal sinus which is so often the cause of persistent suppuration above. In Lothrop's operation the other frontal sinus is opened and a portion of the bony wall of the septum is removed. He states that an operation involving removal of the lower wall defeats any attempt to get satisfactory drainage, and he does not hesitate to remove the floor of both sinuses so as to get as large an opening as nature will allow. It is essential to remove part of the base of the nasal bones and adjacent bone, and the upper part of the septum.

PERRY GOLDSMITH.

The Management of Chronic Frontal Sinusitis with External Manifestations. HAROLD I. LITTLE. (*Surgical Clinics of North America*, p. 1381, October 1921.)

This paper gives some details of 22 cases treated at the Mayo Clinic. Fistula was present in 16, subperiosteal abscess in 5, and mucocele in 1.

In three cases an intranasal operation proved sufficient, but in the remainder this was followed, a week or ten days later, by external operation. The two-stage method of operating presents many

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advantages. The external incision should be just above or just below the eyebrow, so as to minimise scarring. Free removal of bone is essential, so as to avoid abrupt edges and to eliminate pockets. Enlargement of the fronto-nasal duct is readily accomplished because of the previous intranasal operation.

The wound is entirely closed and little post-operative treatment is required. Lavage is seldom necessary. The paper is beautifully illustrated.

DOUGLAS GUTHRIE.

Indications for Pernasal Opening of the Frontal Sinus. Dr LOUIS VAN DEN WILDENBERG, Louvain. (*Bulletin d'Oto-Rhino-Laryngologie*, November 1921.)

The author strongly advocates the pernasal route for most operations on the frontal sinus. He is able to remove the whole floor of a small sinus, and a large part of that of a large one, by this method, and inspects the sinus. He insists on the value of a skiagram before operation. The sinus may be explored by this route if there is reason to suspect it, even in the absence of definite confirmation. He uses the method for both acute and chronic cases, and has recorded several cases even with external fistulæ, cured by endo-nasal drainage. The method is safer than the external [presumably in the hands of one well accustomed to endo-nasal operations—E. W. W.] The writer's results give at least as large a percentage of cure and relief as the external operation: one can resort to the latter later if it seems necessary.

E. WATSON-WILLIAMS.

PHARYNX.

The Question of the Physiological Significance of the Tonsils. FLEISCHMANN, OTTO, Frankfort-on-Main. (*Archiv. für Laryngol.*, Band xxxiv., Heft 1, 1921, p. 30.)

The author considers the tonsils to be internal secreting glands, chiefly on account of their sap containing a reducing agent revealed by its chemical reaction on a solution of gold sodium chloride. It gives rise to the red tint characteristic of colloidal gold solution (as prepared by Faraday, J. D. G.). This reaction can be obtained from normal tonsils and from those which are the subjects of simple enlargements or chronic inflammatory swelling, but not from acutely inflamed tonsils. There seems reason to suppose that the reducing agents in the saliva, at all events parotid saliva, are acquired from the tonsils. This reducing action is characteristic of the supra-renal capsules and the other chromaffin structures, which act as sympathetic

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stimulants. The tonsils are credited with protective action, whether through their carrying off the pathogenetic bacteria or destroying them by phagocytosis. JAMES DUNDAS-GRANT.

Further Contributions to the Physiology and Pathology of the Tonsils and Nose. FLEISCHMANN, OTTO, Frankfort-on-Main. (*Archiv. für Laryngol.*, Band xxxiv., Heft 2 and 3, 1921, p. 265.)

Fleischmann considers that there must be other protective agencies in the mouth which are not contained in the tonsils. The reducing material of the tonsils in itself takes no share in the natural bacterial protection of the mouth, because we see that in acute tonsilitis the reducing agent disappears, just when it is most required. "Such an inconsequence on the part of Nature is unthinkable." Fleischmann then poses the difficult question as to whether perhaps the protection of the mouth against bacteria may depend on a process of oxidation, for which the "reducing" agent supplies simply material for oxidation. JAMES DUNDAS-GRANT.

On the Tonsil-question. FEIN, JOHANN, Vienna. (*Archiv. für Laryngol.*, Band xxxiv., Heft 2 and 3, 1921, p. 319.)

Fein expresses gratitude to Fleischmann for the trouble he has taken to throw light, by means of his investigation, on the puzzling relations of the pharyngeal lymphatic ring and to bring somewhat nearer the question of the function of the tonsils. At the same time he considers the problem still unsolved as to whether the secretion of the tonsils, containing, as it does, a reducing material, is so given off into the blood as to entitle the tonsils to be stamped as endocrine glands. This question he recommends for study at the hands of the biologists. JAMES DUNDAS-GRANT.

Examination of the Blood in Inflammatory Conditions of the Pharynx and Upper Air-passages. V. SCHMIDT. (*Acta Oto-laryngologica*, Vol. iii., fasc. 1 and 2.)

The author's observations were made on cases of acute and chronic tonsillitis, peritonsillar abscess, diphtheria, acute and chronic rhinitis and pharyngitis, acute tracheitis, pyorrhœa alveolaris and scarlatinal angina. He holds that blood examination, particularly with reference to polynuclear leucocytosis, supplies valuable information as to the intensity, increase, and decrease of the disease. Leucocytosis is the first objective sign of infection, as it may be detected in many cases several hours before the rise of temperature or increase of pulse rate. In some cases the leucocytosis persists after the disappearance of the local symptoms and even of the pyrexia and high pulse rate; it is thus an indication of the persistence of

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the toxins in the blood and shows that the disease is not yet terminated. Such a persistent leucocytosis continuing after the pyrexia has ceased affords in many cases extremely important evidence of scarlatina at a time when the rash has disappeared, and the desquamation has not yet disclosed the fact that the case is one of scarlatinal angina. In ordinary angina the leucocytosis does not usually last more than a week. In diphtheria its disappearance coincides with that of the pyrexia and of the membrane.

In peritonsillar abscess the leucocytosis is considerable; often 20,000 to 30,000. After complete evacuation the leucocytosis falls rapidly.

Leucocytosis is often present in chronic tonsillitis, and also in pyorrhœa. It is absent in pharyngitis, but may be found in acute tracheitis. THOMAS GUTHRIE.

Blood Changes in Adenoid Patients. D'ONOFRIO. (*Archiv. Ital. di Otol.*, xxxii., 4, 1921.)

Sixty patients with adenoids were investigated with regard to their blood picture. The examinations were made before operation, and also one month afterwards. The blood was examined in the morning in order to avoid physiological variations. The conclusions arrived at were as follows:—

One cannot establish a constant blood formula in adenoid cases because the blood varies according to the clinical type.

In the respiratory type, where obstruction to breathing is the main characteristic, there is a simple anæmia more or less severe with anisocytosis, and the leucocyte count shows a relative increase in lymphocytes and monocytes.

In the suppurative type, in which an inflammatory process spreads from the naso-pharynx to the middle ear, causing chronic middle ear suppuration, there is a polymorph leucocytosis as well as diminution of the reds.

In a third type the blood is very little altered. These are patients over twenty years of age in which the adenoids have caused merely chronic catarrh.

Removal of the adenoids always improves the blood condition.

J. K. MILNE DICKIE.

The Oral Cavity in Relation to Pain. H. MARX. (*Münch. Med. Wochenschrift*, Nr. 42, Jahr. 68.)

Tests carried out with a mounted needle in a number of patients gave the following clinically and scientifically important results. There is always present in the mucous membrane of the cheeks a definite analgesic zone as first pointed out by Kiesow. Besides

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this many people are found to have more or less extensive, strongly hypalgesic or completely analgesic zones in the region of the palate or the tonsils. In all the cases examined the area of Kiesow was demonstrable. In 4 per cent. there was hyperalgesia of the posterior oral regions. In all the rest there were zones of marked hypalgesia or complete analgesia. In 30 per cent. of cases the tonsils, and in 50 per cent. the uvula, were found to be insensitive to the prick of the needle. Parts of the soft palate were found insensitive in about 30 per cent. and of the hard palate in about 70 per cent. of the cases examined. J. B. HORGAN.

PERORAL ENDOSCOPY.

Dental Plate removed from the Thoracic Œsophagus by the Gastric Route. Dr EDWIN BEER. (*Trans. New York Surgical Society*, 9th March 1921.)

A male swallowed his false teeth $2\frac{3}{4}$ years previously. When admitted to hospital in January 1921 with inability to swallow solid food and loss of weight, the tooth plate was located with the X-rays lying behind the heart, well above the diaphragm. Removal through the œsophagoscope was discarded as the hooks appeared to be embedded, trans-thoracic operation was considered hazardous, consequently laparotomy was decided upon. The hand was introduced into the stomach, and the fingers passed through the cardia, felt the foreign body, disengaged the hooks, and after rotating the plate, brought it into the stomach. The gastric mucosa at the cardiac end was torn during the procedure, but the patient made a good recovery: the gastrostomy tube was removed on the eighth day.

A. LOGAN TURNER.

Safety-Pins in the Stomach: Peroral Gastroscopic removal without Anæsthesia. CHEVALIER JACKSON, M.D., and WILLIAM SPENCER, M.D., Philadelphia. (*Journ. Amer. Med. Assoc.*, Vol. lxxvi., No. 9, 26th February 1921.)

Foreign bodies that have reached the stomach spontaneously will usually pass the pylorus. The exceptions are in cases with an abnormally small pylorus, or a foreign body of unusual size or character. Most cases occur in infants or very young children in whom it is not always certain that the pylorus is normal in size. It is the custom in the authors' Bronchoscopic Clinic not to interfere with foreign bodies in the stomach until after a month or two of fluoroscopic watching. This procedure has almost invariably been justified, in that even safety-pins have usually been passed by the natural passage within three days.

Two exceptions are recorded, one after a sojourn of twenty-seven

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days; two safety-pins were removed from the stomach of a six-month-old infant by gastroscopy without anæsthesia. The pins were linked together, and it required twenty-six minutes to get them turned, so that one of them would present the keeper end for traction. The second case, age twelve months, was one in which an open safety-pin lay in the stomach for several weeks; it was then regurgitated into the œsophagus and removed by esophagoscopy. PERRY GOLDSMITH.

Are there Cases of Foreign Body in the Lung impossible of Bronchoscopic Removal? Dr CHEVALIER JACKSON. (*Laryngoscope*, Vol. xxxi., No. 7, p. 528.)

In the opinion of the author there are no fixed limitations to the peroral bronchoscopic removal of foreign bodies that have gone down into the lungs through the natural passages. More than one attempt may be necessary. In non-opaque bodies which cannot be localised, the question is different, but if of appreciable size they can be located by the X-ray, and always by the physical signs. ("Diagnosis and Localisation of Non-opaque Foreign Bodies in the Bronchi," *Amer. Journ. Roent.*, Vol. vii., No. 6, p. 277, June 1920.)

If a foreign body of appreciable size seems to be beyond bronchoscopy, one of the following four things will happen, if the patient survive: (1) The mechanical problem will be worked out, or (2) a temporarily unreachable foreign body will be reached, or (3) the foreign body will shift to a more favourable position, or (4) the foreign body will be loosened by suppuration—thus the limitations of anything mechanical are only temporary. Some time ago Dr Jackson published five failures, but since then, parallel and identical cases have been successfully bronchoscoped. A few such parallels are described. The two following cases illustrate the advance in bronchoscopy. A child of 2 years aspirated a needle; after failures elsewhere Dr Jackson removed the needle in five minutes without anæsthesia, local or general, from a small posterior branch of the inferior lobe bronchus. "The invaded bronchus was so small that only the smallest of the author's mosquito forceps could be insinuated into it." The buried point was seized and the needle withdrawn. The second case is of a boy 8 years who, when 2½ years old, spat up a mouthful of blood. Since then the chest condition had been treated at various times as purulent bronchitis, bronchiectasis, and tuberculosis. An X-ray revealed a foreign body very low in the base of the right lung. Bronchoscopy without anæsthesia, local or general. "Small fistulæ leading off laterally away from the direction of the foreign body. Connective tissue removed with biting forceps." The wound was dilated, foreign body seized and removed. Pus very foul after connective tissue barrier was removed. Time eleven minutes forty-eight seconds.

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During six years' sojourn the foreign body had worked its way from the orifice of the main bronchus to the bottom of the lung. In some of these cases the X-ray screen was invaluable. Since this article was written the author removed under local anæsthesia, a bullet that had entered between the seventh and eighth ribs posteriorly and lodged in lung tissue, not in a bronchus.

Bronchoscopy looks dangerously easy when one watches Dr Jackson at work, but one must remember the years of patient work and research before these results were possible. "Concentrated work with rubber manikins, dog, or cadaver will eventually solve any problem of bronchoscopic removal." ANDREW CAMPBELL.

Endoscopic Removal of Sand Spurs from Larynx and Tracheo-bronchial Tree. H. MARSHALL TAYLOR, M.D., Jacksonville, Flo. (*Journ. Amer. Med. Assoc.*, Vol. lxxvii., No. 9, 27th August 1921.)

A species of the grass family called *Cenchrus tribuloides* is widely distributed on the North American Continent. In Florida it is known as the sand spur. The spurs are very sharp and cling to anything with which they come in contact. A series of 19 cases is recorded in which they acted as a foreign body in the air passages, though in Jackson's analysis of 882 foreign bodies no mention is made of sand spurs. The flora of Florida, where this grass is most abundant and is indigenous, is therefore a definite etiological factor in foreign bodies in the air passages.

In 18 cases in the author's practice, 16 of the spurs were found to be located at some point in the larynx, generally the anterior commissure. Two were in the right bronchus. A history of inspiring the foreign body with aphonia and pain on swallowing occurred in all cases. Eight complained of pain referred to both ears. When the spur had been in the larynx for more than twenty-four hours, a dirty greyish exudate developed resembling somewhat laryngeal diphtheria. A mild toxæmia was also present.

A fatal case of pulmonary abscess following inhalation of one of these spurs is recorded. PERRY GOLDSMITH.

LOCAL ANÆSTHESIA.

Anæsthesia in Nose and Throat Work. (*Journ. Amer. Med. Assoc.*, Vol. lxxvii., No. 17, 22nd October 1921.)

A Committee was appointed by the American Medical Association under the chairmanship of Dr Emil Mayer, to determine the number of fatalities following local anæsthesia in nose and throat surgery.

Of the 22 deaths reported 11 were from cocaine (in three a nurse's error), one from procaine and cocaine, one from procaine only, and one from alypin and cocaine. All these fatalities have

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occurred within the last two or three years, and with the exception of three, none have been reported. The amount of epinephrin used was carefully investigated, and was not considered a factor in any case.

In a previous report (*Journ. Amer. Med. Assoc.*, No. 75, 315, 31st July 1920), 21 deaths were recorded, 15 from cocaine and 6 from procaine.

The report considers that there are many more fatalities occurring among general surgeons, the specialists, and also amongst dentists.

The following conclusions are recorded:—

(1) Deaths from the administration of local anæsthetics are vastly in excess of the number reported in the medical journals.

(2) In most instances convulsions are the first indication of toxic effects; consciousness is never regained, and death ensues within a comparatively short time.

(3) The customary dosage of local anæsthetics varies from small amounts to very large ones.

(4) There is no check on the manufacturer as to the comparative toxicity of the various batches of drugs that are placed on the market.

(5) The freedom from all effects noticed by so many who have used these drugs has made them oblivious to the likelihood of danger.

(6) The presumption of the Therapeutic Research Committee of the Council on Pharmacy and Chemistry of the American Medical Association, that there are many unrecorded deaths, is thoroughly substantiated.

(7) The appointment of a commission to investigate further these deaths and to take action thereon is vitally necessary.

PERRY GOLDSMITH.

REVIEWS OF BOOKS

Traité des Affections de l'Oreille. M. LERMOYEZ, N. BOULAY, and A. HAUTANT. Royal 8vo, 1000 pages. Published by G. Doin. Paris, 1921.

This is the first of two volumes dealing with diseases of the ear. It includes the methods of examination, generalities of technique, and therapeutics and affections of the Middle and External Ear. Diseases of the Internal Ear and Oto-sclerosis are not included in this volume.

The character of the book is similar to that of most first-class French scientific books in the following respects. It is well printed and illustrated, very well written, wretchedly bound, and very badly indexed. The style, which is best described as "racy," compels and retains the interest of the reader. Classification and Sub-classification

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