

ABSTRACTS.

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NOSE.

The Endonasal Route in the Operative Attack of Frontal Sinusitis.—Dr. J. Bourguet (Paris). "Rev. de Laryngol., d'Otol., et de Rhinol.," October 15, 1919.

The author surveys the treatment of frontal sinusitis. In decrying the usual method of attack (Killian) as being, although the most radical, nevertheless the most disappointing, he will find many sympathisers among British specialists.

Before the Great War the persistence of a post-operative fistula prompted a soul-searching inquiry on the part of the operator as to whether he had not committed some grave error in technique. But, during the war, just as his cases have passed on to other surgeons and hospitals, so have the patients of others arrived under his care in various post-operative stages, and he learns that he is in no wise isolated in his experience of this humiliating sequela.

Briefly, the author attributes this frequent source of disappointment to a progressive narrowing of the infundibulum by granulations and scar-tissue, so that the sinus becomes a closed empyema. He has observed an entire closure of the fronto-nasal canal in patients subject to re-operation.

A further disadvantage is the external scar. Technically, the endonasal operation described corresponds closely to that familiar to British rhinologists. The author considers that the drainage obtained dispenses with any need for the curette.

The paper, especially the first part detailing arguments against the "bridge" operation, should be read in detail.

H. Lawson Whale.

Treatment of Ozaena by Zinc Chloride.—Prof. H. Lavrand (Lille).—"Rev. de Laryngol., d'Otol., et de Rhinol.," September 30, 1919.

The treatment recommended consists in swabbing the middle meatal region fairly briskly with a solution of zinc chloride in glycerine, 1 part in 30. No lengthy or wearisome lavage is required. The good local results bring in sequence a happy influence on the general condition. In prolonged cases curettage of the underlying bone may be instituted as an adjuvant.

H. Lawson Whale.

Rare Case of Retention of Projectile in the Nose.—F. Brunetti. "Arch. Ital. di Otol.," xxx, No. 4.

A soldier was wounded on the left side of the nose in May, 1916. A simple dressing was applied at the time and the wound healed up. Since then till seen by the writer in December, 1918, he had complained repeatedly of nasal obstruction, but a rhinoscopic examination had never

been made or even suggested. Finally an X-ray plate was taken which showed a foreign body in the nose. External rhinotomy was suggested but declined by the patient. On being referred to the author the foreign body was at once seen blocking the whole left side of the nose. It was extracted without any difficulty, and was found to be a circular plate of metal measuring about 2 cm. in diameter and 9 mm. in thickness.

J. K. Milne Dickie.

Hoarseness caused by Thyro-arytæmoid Interni Paresis with Symptoms Simulating Acute Pulmonary Tuberculosis due to a Sinus Infection.—Lee Myers. "The Laryngoscope," December, 1919, vol. xxix, p. 720.

Male, aged thirty. Four weeks before examination had contracted cold which gradually became worse. Hoarseness, loss of weight, chills, daily rise of temperature, persistent dry cough and loss of appetite. An X-ray of the chest suggested pulmonary tuberculosis; sputum negative. Myers found the cords congested, swollen and somewhat glazed in appearance. The cords abducted normally, but did not approximate in the centre. He applied cocaine and adrenalin to the nose. Using negative pressure with a suction of 23 in. by the vacuum gauge he obtained large amounts of pus from the sphenoidal sinuses. In three weeks the patient's voice returned to normal.

J. S. Fraser.

E.A.R.

The Eustachian Tube: Its Significance in Otology.—Douglas Guthrie.
"Edin. Med. Journ.," June, 1920.

This paper supplies a review of our present-day knowledge of the Eustachian tube.

Since the time of Eustachius, anatomists have repeatedly raised the question of whether the tube is normally open or closed. Toynbee showed that a closed tube was necessary for perfect hearing, and his views are generally adopted to-day. Reference is also made to various researches on the comparative anatomy, development and histology of the Eustachian tube.

The pathology of this structure has received scant attention, although, since the introduction of the naso-pharyngoscope, interesting clinical observations have been made by Holmes, Wood, Yearsley and others, with results which are here summarised. Many curious cases of foreign body in the Eustachian tube have been reported.

The Eustachian catheter was discovered in 1724 by Guyot, a post-master at Versailles, who relieved his own deafness by pumping air through a bent tin tube introduced into the naso-pharynx by way of the mouth. Later investigations led to the adoption of the present form of instrument. In 1862 Politzer advocated the method of inflation which bears his name, stating that a greater effect could be obtained by this means than by the catheter or Valsalva method. The direct treatment of the Eustachian tube, under the guidance of the naso-pharyngoscope, has had a great vogue in certain quarters, and encouraging results are claimed. Finally, the closure of the Eustachian tube by curettage, as suggested by Yankauer, has been followed by cure in about half the cases of chronic suppurative otitis which were thus treated.

Author's abstract.

The Answer to the Opponents of the Radical Mastoid Operation.—
Wesley C. Bowers. "The Laryngoscope," November, 1918,
p. 790.

The author holds that there are men doing the radical operation without knowing the indications for operating or the local anatomy, and without having acquired a technique. Loss of hearing, facial paralysis, failure to stop the discharge, or death in several consecutive cases give rise to distrust. The radical mastoid operation is not a simple one, either in its technique or its indications. It is not an operation for curing a chronic infection limited to the middle ear and Eustachian tube, except in very exceptional cases. It is for curing infection in the tympanic vault or mastoid bone or both. Occasionally the X ray will help us. Many cases of chronic discharge from the middle ear can be cured by local treatment. In time Nature herself will cure, in some cases, by producing a picture very much like the cavity produced by the radical operation. It is, however, much more common for Nature to destroy bone over the dura, sinus, or labyrinth, causing serious complications. If we can be sure that all the infection is limited to a certain part of the vault or mastoid, then a modification of the radical is justifiable. Such cases are few. The modified operation has shown little if any better functional results than the radical when the radical is properly done.

The number of persons who have good hearing in the infected ear after a prolonged middle-ear discharge is relatively small. When a patient hears mainly with the affected ear it is not justifiable to do a radical, except in cases in which the symptoms are very ominous. These patients should be instructed in all the symptoms of danger.

It is objected that the radical mastoid fails to stop the discharge. The chief causes of failure are—(1) failure to so modify the bony meatus as to produce the best possible facilities for drainage and inspection of the middle ear. The external portion of the bony meatus can be enlarged by removing a portion of the floor, posterior wall and anterior wall. It is generally possible to remove completely the convexity upon the posterior and inferior walls of the meatus, but occasionally the anterior wall is so very convex that it is impossible to remove enough bone without exposing the fibro-cartilaginous wall of the mandibular joint. (2) Failure to perfectly clean out the various recesses of the middle ear. (a) The post-tympanic space (sinus tympani?) is sometimes very deep, and generally lodges a considerable quantity of unhealthy granulations and serves as a pocket for the retention of secretion. If we first get a good exposure of the bottom of this space by the removal of the meatal floor, we can remove every particle of necrotic tissue with the least chance of any injury to the facial nerve. (b) The floor of the middle ear with the annulus tympanicus is often very deep and serves as a pocket for secretion. If the convexity of the floor has been removed sufficiently the bottom of this space should be on a higher level than the floor of the meatus. (c) Omission to thoroughly clean out the Eustachian tube. Many Eustachian tubes are surrounded by a considerable number of cells which may extend as far as the isthmus. These cells should be curetted with just as much care as any cells in the mastoid. The carotid artery lies very close below and behind, but with care there is little danger of injuring it, even though we expose it. If we have properly taken away the convex anterior meatal wall, the mouth of the Eustachian tube will be plainly visible and much easier to treat at future dressings. The successful application of a primary skin-graft into

the tube will do much toward closing it off from the middle ear. (d) An inadequate fibro-cartilaginous meatus. This must be large enough to admit a fair-sized finger. (e) Omission to instruct patients in the proper after-treatment of the cavity. They neglect to have the desquamated epithelium and wax removed from the cavity at suitable intervals.

The great majority of cases never have a post-operative temperature above 101° F.; the temperature seldom lasts more than four or five days. We must endeavour to avoid any traumatism to the stapes. It is wiser to leave some granulations around these parts, provided they appear healthy, than to take too great a chance of injuring the membranes covering the windows. It is wise to make sure that the stapes is not bound down by adhesions and that it moves freely in its niche. Anything we can do to prevent the formation of dense fibrous tissue and adhesions around the windows will be likely to produce better hearing. The annulus tympanicus is entirely removed by means of a curette. The jugular bulb is sometimes exposed in the floor of the middle ear. During the procedure of cleaning out the middle ear time spent in the application of adrenalin is well expended, as much less sponging is thereby required. If the cells surrounding the tube are diseased they are curetted and the processus cochleariformis removed. Bowers turns up a meatal flap and dissects the cartilage and subcutaneous tissue from the skin-flap. The flap is sutured to the subcutaneous tissue or periosteum in order to draw it well up. Before grafting, the wound is again packed firmly with adrenalin gauze. Bowers uses the primary skin-graft in all cases, except those in which (1) the dura or sinus wall are actually inflamed; (2) a fistula is present in a semicircular canal or other opening into the labyrinth; (3) there are symptoms of labyrinthine or meningeal irritation. In some of these cases he uses the graft in the parts not under suspicion. Some of the cavities are dry in two weeks, while others go two or three months before they become dry. The recent average time for Bowers' cases is three to four weeks. The time required to obtain a dry cavity depends in part upon the patient's age and constitutional state.

Bowers reports on 112 cases operated and cared for by himself within the past two years. Deaths, 0; complete facial paralysis, 0; partial facial paralysis, 1. Of 107 asked to report for examination, 23 failed to respond. From the 84 who reported the following particulars were learned: Discharge—none, 63; considerable, 5; occasional, 16. Hearing—much better, 13; better, 38; same, 28; worse, 5. The bad results were mainly in his first nine cases.

J. S. Fraser.

Lateral Sinus Thrombosis (Symptoms and Treatment).—D. H. Ballou.
"The Laryngoscope," June, 1918, p. 464.

Ballou records three cases of lateral sinus thrombosis following *chronic* middle-ear suppuration. The thrombus was on the right side in all cases. The symptoms were characteristic, showing the usual triad—chills, intermittent fever and sweats. There was a marked flush of the right cheek only, *i.e.* the side of the lesion. Blood-cultures, lumbar puncture and eye-grounds were negative in all cases. X-ray showed small sclerosed mastoid with the sinus far forward, but apparently no thrombus. *Operative findings.*—In all cases the mastoid was sclerosed, but very vascular and pulsating pus was present under tension. The lateral sinus was superficial, very far forward, gangrenous, or covered with lymph and granulations. All diseased bone was removed

until apparently healthy sinus was reached in both directions. Ballon holds that, where the thrombus can be removed and free bleeding obtained at both ends, the jugular vein need not be ligated. This was the treatment in two cases.

J. S. Fraser.

ŒSOPHAGUS.

Extreme Œsophagectasia.—**H. Batty Shaw.** "Proc. Roy. Soc. Med.," Clinical Section, December, 1919, p. 9.

A female, aged sixty-six, came for treatment because she had become so wasted and had a cough. There was a history of dyspepia, which took the form of pain occurring shortly after taking solid food. The act of "vomiting" relieved the pain. For years she had lived on liquid food, which caused her no pain or vomiting.

The taking of solid food was followed by the following symptoms:

- (1) Pain at the epigastrium.
- (2) This pain was accompanied by what she called vomiting, but what was really regurgitation of food.
- (3) The act of taking the solid food soon provoked a cough.
- (4) Occasional breathlessness, especially after attempting to take more solid food than usual.
- (5) Liquid food caused none of these symptoms.

She was radiographically examined, with the result that diagnosis of an extremely marked œsophagectasia was established. On the administration of the bismuth meal a sharply defined pencil-like portion of it was shown to reach the point of contraction at the lower end of the œsophagus into the stomach.

The case showed an extremely marked dilatation, and further, it demonstrates that it is possible when the above five clinical manifestations can be defined, to diagnose almost with certainty a condition which in the absence of such symptoms would be missed by a physician and would only be discovered by a radiographer, who in the routine examination of cases in which bismuth meals were being investigated paid attention not only to the behaviour of such meals as they passed through the stomach and intestines, but also through the œsophagus.

Archer Ryland.

MISCELLANEOUS.

Chronic Disease and its Association with Focal Sepsis.—**Sydney Pern** (Melbourne). "Med. Journ. Austr.," March 13, 1920.

The focal infections are classed under the following headings: dental, nasal, tonsillar, gonorrhœal, prostatic, middle-ear.

As bacteria do not thrive in the blood-stream, it is important to know if there is a focus which can constantly supply bacteria to it, or one in which the blood gets only a casual invasion. The immunity mechanism which deals with infections has a limit to its possibilities, and sooner or later breaks down. When organisms gain entrance to the blood there is a tendency to group in one type of tissues at a time—for instance, in rheumatoid arthritis the joints are attacked; the other tissues are left alone.

Observations on 578 cases of some form of focal infection are tabulated in ten tables. The site of the primary focus, the tissues involved in the secondary invasion, age-incidence, etc., are considered.

A. J. Brady.