

was to be hoped that we would now learn to interfere with promptitude and skill the moment the critical situation became clear. There remained a number of fatalities which were the result of operations blamelessly carried out. Here most assistance would be got from the delicacy of our clinical examinations and the experiences obtained from accurate *post-mortem* investigation. Operation should not be resorted to when an acute was superadded upon a chronic affection; nor should it be resorted to when acute irritation had been induced by intra-nasal interference. If, under these conditions, operation was unavoidable, then primary suturing of the external skin wound should be omitted. Primary suture should be restricted to cases of simple mucous secretion or mild suppuration. By the use of secondary suturing erysipelas and osteomyelitis could be avoided. Packing of the wound should be done loosely, and the tampons should be removed after syringing with weak solution of hydrogen peroxide, the day after operation if possible, in order to prevent retention of the secretions. Diseased antra, especially if their secretion was virulent, should be operated on radically a sufficient time before the frontal sinus operation; or if at the same sitting then before the frontal sinus is dealt with. Above all, we should be careful not to interfere with that part of the middle turbinal where the olfactory nerve branches were distributed, since these branches were surrounded with lymphatic spaces directly continuous with the subarachnoid space. If pathogenic organisms once penetrated the olfactory lymphatic spaces then rapidly fatal meningitis was as good as inevitable. Patients suffering from other serious diseases, such as chronic nephritis, diabetes, etc., should be left alone. In persistent post-operative neuralgia the supra-orbital nerve should be removed. Neurasthenic troubles necessitated a more prolonged general treatment.

Dr. BOWIACH (Charkow) preferred conservative measures. In antral cases he curetted the antrum by means of curved curettes through the nasal opening, and also through the alveolar opening.

(To be continued.)

Abstracts.

PHARYNX.

Lautmann (Paris).—On Anæsthesia for the Removal of Adenoids.
 "Zeitschr. f. Laryngol.," vol. iii, Part IV.

The writer discusses at some length the relative advantages of performing the operation without an anæsthetic, and of the use of either local or general anæsthesia. For children of not more than four years of age, who can be easily kept still, it is preferable to work without an anæsthetic. Beyond this age an anæsthetic has the great advantage of preventing the struggling, which is probably the most common cause of incomplete operation. After a trial of Ruprecht's method of local anæsthesia for adenotomy it was decided to reserve it for adults, in whom it is certainly less dangerous than general anæsthesia and renders thorough operation more certain. For all other cases the author prefers general anæsthesia by ethyl chloride, administered by Camus' apparatus, to any other method. He has used it in some 200 cases with satisfactory results in all.

The apparatus permits of complete narcosis with the use of very small quantities of the drug. For children of about four years of age 1 grm. is enough, for older children 2 grm., a quantity which will give a sufficiently deep anæsthesia to allow of the careful and complete removal of tonsils and adenoids in patients of twelve to fourteen years of age. For adults 3 grm. are required. None of the patients have complained of headache after operation; one highly nervous boy only stated that he had suffered for the rest of the day from attacks of giddiness. Hitherto no death has been recorded as a result of anæsthesia with Camus' apparatus.

Thomas Guthrie.

Grossard and Kaufmann.—The Complications of Adenoïdectomy. "Bull. et Mém. de la Soc. Franç. d'Oto-Rhino-Laryngol.," vol. xxvii, Part I, 1911, p. 5.

This long and interesting report is founded upon communications collected from various otologists in France, England, Brussels, Algiers, etc. It is divided into parts dealing with—(1) accidents from incomplete diagnosis, (2) hæmorrhage, (3) traumatic accidents, (4) infections, (5) nervous complications, (6) various accidents, and the following gives a short abstract thereof.

(1) *Accidents from Incomplete Diagnosis.*—Comprises aberrant arteries, large Eustachian cushions, prominent atlas, gummata, and tuberculous vegetations.

(2) *Hæmorrhage* may be primary or secondary; due to hæmophilia, anemia, exophthalmic goitre, valvular disease, leukæmia, menstrual, arterio-sclerosis, or following turgescence from the use of such anæsthetics as ethyl bromide. Local causes are arterial anomalies and incomplete operation. Secondary are more dangerous than primary hæmorrhages. Instances of arterial anomalies are quoted from Piaget, Schmiegallow, StClair Thomson, and Macleod Yearsley. Aboulker furnishes cases due to injury of the vomer, and nephritis, Chavasse one from unsuspected scarlet fever. The treatment of hæmorrhage may be by ice, rest, hæmostatic powders, hot water, hydrogen peroxide, artificial serum, tamponning of the naso-pharynx, cocaine and adrenalin. In secondary bleeding the authors consider infections are most commonly the cause, and that forceps are more likely than curettes to be followed by hæmorrhage.

(3) *Traumatic accidents* are more rare. Avulsion of teeth, injury to vomer, Eustachian tubes, soft palate and pharynx. Cases are quoted. Adhesions may occur later; otitis may supervene.

(4) *Infections* may occur unless the operation is done under aseptic precautions, and preventive measures are described. Pyorrhœa and dental caries are noted as causes. Brindel is quoted regarding a case who walked about the streets after operation, contracted a serious infectious amygdalitis, ending with detachment of the retina. Dan McKenzie has noted slight fever after operations for adenoids. The infections that may occur are acute otitis, suppurative otitis, pharyngitis, adenitis, pneumonia, bronchitis, acute septicæmia, fœtid bronchitis, and angina. Cases bearing upon these causes are quoted from Béco, Cornet, Delsaux, Macleod Yearsley, Koenig, Aka, and Glover.

(5) *Nervous complications* comprise spasm of the larynx (Délié), hysteria, epilepsy, chorea, shock, mental alienation (Dupré).

(6) *Various Accidents.*—Breaking of the curette (Macleod Yearsley, Holmes, Garlick, Chaveaux, Castex). Torticollis (Ferreri, Moure, Boulai, Siefert, and others). Cervical pain (especially after operation in Rose's

position). Inspiration of portions of growth into the respiratory passages (Bar). Collapse. Late syncope (Chaveaux). Paralysis of the soft palate (Robaud). Phlebitis of the superficial veins of the face (Moure, Wolff). Passage of an adenoid fragment into the Eustachian tube (Kronenberg). Rheumatism (Broeckaert, Gallois and Parrel). Tuberculous meningitis (Mahu, Koenig). Acute meningitis (Jacques). Traumatic scarlatina (Bergé, Delsaux, and others) receives considerable attention. Purpura (Boulai). Chancre (Fournier). Accidents due to anæsthesia include deaths from chloroform, ether, and bromide of ethyl (Suarez and Mendoza, Menier, and others)

The report is a valuable contribution to the literature of the adenoid operation.
Macleod Yearsley.

Gill, Richard.—**Ænsthæsia in Post-pharyngeal Abscess.** "Proc. Roy. Soc. Med." (Anæsthetic Section), March, 1911.

This communication refers to the case of a child, aged three, who was supposed to have "adenoids." Chloroform was given, but there was considerable difficulty in respiration. When the mouth was opened it was seen that the soft palate was pushed forward by a swelling, and the breathing became further obstructed. When the abscess was opened Mr. Gill grasped the child by the legs and inverted it so as to allow the pus to drain by gravitation. Mr. H. Bellamy Gardner was of opinion that in such cases a general anæsthetic should not be administered.

J. S. Fraser.

Macdonald, A. G.—**A Record of Ninety Diphtheria Carriers.** "Lancet," March 25, 1911.

At the end of a very interesting paper the author thus summarises his work: (1) Carriers are found at all ages and of either sex. (2) The previous carrier period cannot be ascertained but may in some cases be inferred. (3) Nor can it be said in many cases that one case was derived from another. (4) The presence or absence of an obvious pathological condition is no criterion of the fact of a carrier, of the length of carrier life, or of virulence. (5) The length of carrier life seems to have no effect on virulence. (6) Carriers are found amongst those most intimately associated with other carriers or cases. (7) The control of diphtheria depends (assuming control of the case) on the control of the carrier. (8) The carrier should be notified as a case of diphtheria, no matter of what age or sex, and due quarantine and observation should be maintained until satisfactory demonstration of the disappearance of the *Bacillus diphtheridæ*. (9) As everything points to the conclusion that the bacillus is essentially a human parasite, a determined attack on the lines of thorough bacteriological investigation should have no difficulty in stamping out diphtheria altogether from the land. (10) Evidence points to the slow, inevitable, mechanical distribution of the disease which persists endemic in the undiscovered carriers. Epidemicity depends entirely upon the number and nature of the carriers.

Macleod Yearsley.

Cornet (Chalons-sur-Marne).—**Large Adenoma of the Superior Surface of the Soft Palate undergoing Epitheliomatous Degeneration.** "Ann. des Mal. de l'Oreille, du Larynx, du Nez, et du Pharynx," vol. xxxvi, Part I.

A woman, aged twenty-seven, presented herself at the author's clinic

with the following history: The day before, during a violent fit of coughing accompanied by nausea, a fleshy mass suddenly protruded into the mouth; the cough abated, and the mass returned into the throat, but since then she was continually troubled with nausea, associated each time with prolapse of the growth into the buccal cavity. Her health had previously been good, but for the past nine or ten months she had experienced some little difficulty in nasal respiration, and occasionally expectorated a little blood in the morning. Examination of the oropharynx revealed the presence of a large tumour which hung behind the free border of the velum. The growth, raspberry red in colour, was irregularly rounded, multi-lobed, with a cauliflower-like surface. Transversely it extended from the right posterior faucial pillar to midway between the uvula and the left posterior pillar, and in a vertical direction it dipped down to the base of the tongue; in consistence it was hard and did not bleed when touched. When nausea was induced the growth protruded from the naso-pharynx, and swinging from behind forwards was smartly driven into the mouth; during this movement it carried the palate with it. Digital examination showed the growth to be attached by its anterior surface to the right half of the palate. The author draws attention to the insidious course of the growth: it had attained the size of a small hen's egg without causing notable nasal obstruction; this depended upon its position rather than its size. Probably before prolapsing into the oropharynx the growth was more or less fixed behind the right choana, leaving the left side of the naso-pharynx free. Histologically the growth was an adenoma undergoing epitheliomatous degeneration. Adenomata usually develop at the expense of the anterior surface of the palate; in the present case the growth was implanted on the posterior surface. Removal was easily effected under cocaine anæsthesia. Having placed the patient in Rose's position the soft palate was tied up with a gauze thong; the tumour was then seized with an Escat's fibroma forceps and firmly drawn forward by an assistant, after which, with the left index finger as a guide, the pedicle was divided with curved scissors; the patient made an excellent recovery. Full details of the histological examination of the neoplasm are recorded.

H. Clayton Fox.

NOSE.

Tunis, J. P. (Philadelphia).—Multiple Abscesses of the Nasal Submucosa in a Case of Leukæmia. "Amer. Journ. Med. Sci.," January, 1911.

The case reported was one of ten cases of leukæmia in which the writer had the opportunity of examining the nasal cavities *post mortem*. It was the only one which showed the condition described. A man, aged forty-four, died after an illness lasting three weeks from acute lymphatic leukæmia. Epistaxis, hæmorrhages from the gums, and swelling of the cervical glands were the prominent features of the disease. Portions of mucous membrane removed from the middle and inferior turbinals showed to the naked eye numerous punctate hæmorrhages, and microscopically much thickening with œdema and round-cell infiltration, and in places small abscesses with large numbers of streptococci in their border zone. It was estimated that there were at least one hundred of these abscesses