

5. The hollowing out is regular, and contains no angles or rugosities.
6. If the mastoid is sclerosed, as is far from rare in old otorrhœas, the work is easier.

M. NOQUET (Lille). *A Case of Rupture of the Membrana Tympani by an Explosion.*

The patient had never suffered from his ears. He was firing at some pigeons, when the left barrel of his gun burst, causing a very loud explosion. By a lucky accident his left hand was spared, but a rupture of the left membrane was caused, with a vertiginous sensation of short duration, facial pallor, subjective noises, and hæmorrhage from the meatus. The left ear became immediately deaf.

M. Noquet found a very marked diminution in the hearing, but the tuning fork was a little better perceived by the left ear. The rupture, buttonhole-shaped, was situated in the posterior segment of the membrane. After five weeks of treatment by syringing, followed by antiseptic instillations, the rupture cicatrized, and the hearing returned to nearly normal. Now, some months after the accident, the hearing is perfect.

ABSTRACTS.

NOSE, &c.

Ardénne.—*A Case of Chronic Abscess of the Naso-Pharyngeal Vault.* "Rev. Hebd. de Lar.," Feb. 12, 1898.

THE case reported is that of a man of fifty-nine, who, for about twelve months had complained of nasal obstruction and the various symptoms dependent on mouth-breathing. Pain had never been experienced. The history gave no information of value. The urine contained small quantities of sugar and albumen.

On examination the post-nasal space was found to be occupied by a smooth, red, globular mass, attached by a broad base to the vault and of the size of a walnut. This proved to be filled with yellow, non-fœtid pus, which escaped on the accidental rupture of the abscess wall during digital examination. Careful palpation failed to discover any bare bone, and evidence of Pott's disease was absent. After free opening and swabbing with zinc chloride, the state of parts speedily returned to the normal. Microscopic examination of the tissue failed to reveal evidence of tuberculosis or of the presence of a definite cyst wall. *Waggett.*

Brindel.—*Sinusitis and Broncho-Pneumonic Complications.* "Rev. Hebd. de Lar.," Feb. 5, 1898.

THIS paper deals with the secondary complications due to pus infection of the air passages from suppurative disease of the nasal accessory cavities. Illustrative cases are given in which successive attacks of pulmonary trouble were proved to be due to such causes. The writer, however, adds the caution that, where disease of a sinus is co-existent with pulmonary disease, a causal relationship is not invariably present; and he cites a case in which tubercular disease of the lung was accompanied

by simple empyema of the maxillary antrum. Nevertheless, in such a case the cure of a suppurative centre is decidedly indicated as a preventative against infection by strepto- or staphylococci of a tubercular lesion of the lower air passages. *Waggett.*

Hecht, Hugo.—*On Ozæna.* "Münchener Med. Woch.," 1898, No. 7.

HE reports two cases of ozæna treated with electrolysis. Both received six applications, lasting for ten minutes, of from twenty-five to thirty milliampères. Treatment lasted for two months, and, in addition, the nasal douche was used thrice daily. The first case showed transient improvement. Some time after it was in *statu quo*. In the second case, where he describes the anterior part of the nose as almost normal, there was improvement two months after treatment was finished. The fœtor had subsided, but there was still semifluid greenish secretion present, which was in parts dried into crusts, and could be removed with forceps. He ascribes the want of improvement in the first case to the irreparable atrophy of the mucous membrane. He considers the two cases to support the tropho-neurotic theory of Rethi from a clinical therapeutic basis, and to be against a bacterial origin for ozæna. *Guild.*

Lieven, Anton.—*The Aix-la-Chapelle Treatment of Syphilis of the Nose and Throat.* "Laryngoscope," May, 1898.

THE author remarks :—

1. That, not only iodine, but also mercury is indicated in tertiary syphilis of the upper respiratory tract.

2. That inunction is the best method for exhibiting the action of mercury.

His experience is that the shorter the period between the primary infection and the tertiary manifestations the more efficacious the action of the mercurial therapy; and also that nasal syphilitic gummata are more often observed from one to three years after the primary infection; and that tertiary manifestations in the upper respiratory tract are not always so late of appearing as is usually supposed.

The author regards inunction as the best method of exhibiting mercury in these cases, and describes fully the method of administration as followed out at Aix, with directions as to diet, clothing, exercise, etc. *W. Milligan.*

Mackenzie, G. H.—*A Case of Malignant Polypus of the Nose; with Remarks.* "Brit. Med. Journ.," July 9, 1898.

IN this case the patient—a lady, aged sixty—came under the author's care suffering from nasal obstruction. The symptom which had first drawn attention to something being wrong was an attack of left-sided nasal hæmorrhage of a somewhat profuse nature. Upon examination many polypi were found in both nostrils. In the right nostril they presented the appearances of ordinary mucous polypi; but in the left they had a dark brown or slaty-grey colour, and, upon probing, bled freely. No pain was present, and no glandular enlargement. As any radical interference was refused, treatment simply consisted in removing the more projecting portions of the growths.

At first microscopic examination of portions removed showed the ordinary appearance of mucous polypi; but on the third occasion, when sections were made, pure sarcomatous tissue was found. The growth was, in fact, a round-celled sarcoma of great vascularity and rapid growth, in which frequent and repeated hæmorrhage had taken place, and in and around which low forms of septic inflammatory changes had arisen.

The author remarks that the results of the various microscopic examinations, made at intervals of about one month, go to show that the polypi in the left nostril were originally benign, and that sarcomatous invasion or degeneration was of

comparatively recent occurrence. The question of how far traumatism (surgical) can be held responsible for inducing malignancy in ordinary mucous polypi is discussed. Early diagnosis of the nature of the growth is insisted upon, and two features of special value in diagnosis are commented upon—viz., hæmorrhage and the locality of the growth. The former appears to be the most important of all symptoms, and is usually an early symptom, severe and recurrent.

Attachment of the growth to the septum appears to be a distinctly suspicious sign, and is regarded by some authors as a sure indication of malignancy.

Cases of nasal sarcomata may occur at any age, although usually found in people over forty years old.

W. Milligan.

Richards, G. L.—*On the Use of Formaldehyde in Atrophic Rhinitis.* "Laryngoscope," May, 1898.

THE writer uses formaldehyde as follows:—After removal of all crusts and debris with a weak alkaline solution, by means of a syringe and cotton applicators, both nostrils are well washed out with a solution of formaldehyde containing about five to ten drops of the forty per cent. solution to eight ounces of warm water. On account of its irritating properties, it is well to previously spray the passages with cocaine solution.

It is claimed that under its use crusts diminish in number and all unpleasant odour ceases.

W. Milligan.

Schech, Prof. (Munich).—*Caries of the Sphenoid.* "Münchener Med. Woch.," No. 27, 1898.

WHILE chronic suppurative catarrh of the sphenoidal sinus—vulgo empyæma—frequently runs a latent course or is accompanied with headache, giddiness, or a purulent discharge, empyæma combined with diffuse bone disease usually causes severe, dangerous, or fatal results. Owing to its proximity to important osseous fissures, blindness, ocular paralysis, erosion of the carotid or other vessels, thrombosis, meningitis, sub-dural or brain abscess may be caused. Extensive caries of the sphenoid is usually due to some dyscrasia, e.g., syphilis, malignant growth. He has seen three cases.

I. Woman, twenty-eight, complained of headache and nasal obstruction. A tumour was found growing from the lower anterior wall of the sphenoidal sinus, and filling the naso-pharynx; it was removed. Microscopically it was benign. Suspicious, however, of serious disease was paralysis of the motor oculi and abducens, while the opticus was intact. As there was purulent discharge from the sinus it was washed out. This was followed by unconsciousness, rigor, fever, and excessive polyuria with a large amount of sugar. The sugar disappeared after a few days. After four weeks, ptosis of the left eye, and diminution of the visual field occurred, headache increased, with a blood-tinged foetid discharge from the nose. Two months later there was total blindness; opening into the sinus was enlarged from the nose. Antispecific treatment had no effect, so the diagnosis of a malignant growth was made. *Post mortem* showed a glio-sarcoma.

II. The second and third cases were syphilitic. Both had purulent discharge from the sphenoidal sinus, with bare bone on the posterior superior part of the septum and around the opening of the sphenoidal sinus. Treatment was anti-specific and locally regular cleansing of the nasal fossæ, introduction of a probe coated with hexamethylviolet into the sphenoidal sinus and insufflation of iodo on the carious spots. In spite of treatment the disease lasted for months. One of the patients suffered from an apoplectic attack, with unilateral paralysis of tongue, face, as well as great weakness of the arms and legs. This disappeared in a few months with inunctions of mercury and iodide internally. The other

case suffered early from headaches, and, later, from tingling and formication in the arms and finger tips, as well as attacks of vomiting and unconsciousness. Recovery also followed in this case.

Schetch points out that in such cases severe injury may be easily done by local measures; in the first case the symptoms produced were those of puncture of the diabetic area of the medulla. One cannot know whether there is a hole in the bone, and communication with the interior of the skull, or adhesions which may be broken down by a probe or syringing, causing fatal results. *Guild.*

Todd, C.—*A Form of External Rhinitis due to the Klebs-Loeffler Bacillus appearing in Children Convalescent from Scarlet Fever.* "Lancet," May 28, 1898. (The author applies the term "external" to what is more generally known as "anterior" or "vestibular" rhinitis.—*Rep.*)

CHILDREN in hospital during their convalescence from scarlet fever are peculiarly liable to a certain form of external rhinitis.

Clinical history.—The first sign of anything abnormal is a slight redness of the posterior margin of one or both nostrils, usually beginning at the inner or outer angle and at the muco-cutaneous junction. The redness becomes more intense, and ultimately a moist granular-looking raw surface results; this surface bleeds easily, and is often covered by a crust which may almost, or completely, block up the nostril. This is more commonly the case in younger children who scratch their nostrils and so cause bleeding. There is never any formation of membrane and the process does not appear to extend backwards into the nasal cavity, but in many cases it spreads down to the upper lip in the form of an eczematous area apparently caused by the infective discharge. This discharge is usually slight and not uncommonly absent. The nostrils remain in this granular condition for a variable time—from one to four or five weeks—and then gradually resume their normal condition. During the course of this rhinitis there is a tendency to the formation of pustules on parts of the body exposed to contact with the discharge. In many cases the face has a "spotty" appearance due to the presence of several minute pustules, and at times larger pustules are seen, more especially on the hands, and apparently originating in some scratch or other slight lesion or at the edges of the nails. The rhinitis does not appear to have any effect upon the general health, and is unaccompanied by any rise of temperature. There is no albuminuria or marked glandular swelling coincident with the rhinitis; but as the children are convalescent from scarlet fever the submaxillary glands in many cases are enlarged, and it is difficult to say how much may be due to the rhinitis. In no case have any paralytic symptoms been observed in the fifty-one cases recorded, though these have been carefully looked for. This form of rhinitis appears to be contagious, and spreads, though not rapidly, among young children when introduced into a convalescent ward where the children are playing together and so coming into close contact.

Children are most commonly affected about the age of three or four. No case occurred after the age of twelve years. Fifty-one cases occurred amongst three hundred and sixty-five children affected with scarlatina—almost fifteen per cent; it is, therefore, not a rare occurrence. The bacillus isolated was found to be morphologically indistinguishable from the Klebs-Loeffler bacillus of diphtheria. The cultures were virulent for guinea-pigs. The children affected with rhinitis had not been exposed to any extent to infection from cases of diphtheria while in hospital. On the other hand, although there occurred fifty-one cases of rhinitis, accompanied by a bacillus indistinguishable from the true diphtheria bacillus, only one case of diphtheria occurred.

Recapitulation and Remarks.—(1) Children convalescent from scarlet fever in hospital are very liable to a certain form of external rhinitis, often accompanied by the formation of secondary pustules on various parts of the body. (2) This rhinitis, though not membranous, is associated with the presence of the Klebs-Loeffler bacillus in the nostrils, this organism being absent from the fauces. (3) It is contagious as such, but has not been observed to give rise to faucial or laryngeal diphtheria. (4) It is unaccompanied by rise of temperature, albuminuria, or marked glandular enlargement. (5) It appears to be limited to children under thirteen years of age, and has been most frequently observed at the ages of three and four years. The fact that the bacillus, though present in the nostrils in large numbers and causing a local lesion, does not give rise to any constitutional symptoms, or to faucial or laryngeal diphtheria, suggests that its virulence is modified to a remarkable extent. It is virulent to guinea-pigs, when inoculated subcutaneously; but this is no criterion of its virulence to the human being, as was shown by Dr. Klein in the case of diphtheria bacilli taken from the fauces of patients suffering from diphtheria. Why the bacillus limits itself to the nostrils and does not invade the tonsils is very hard to see, as the tonsils must be liable to repeated infection, both from the nasal passages direct and through the mouth. It appears not improbable that, under certain conditions, this feebly virulent bacillus may acquire a higher degree of virulence; and this point possesses a peculiar interest in view of the large number of cases of diphtheria met with after scarlet fever.

Remarks by Prof. KANTHACK.—As Dr. Todd read the above paper during an Act for the M.D. degree, I allow myself the privilege of adding a few critical remarks which, in substance, were offered at the time, and which are intended to fill some gaps in a valuable piece of work. It is important in connection with Dr. Todd's paper to allude to the observations of Dr. Cautley, who examined the nasal secretion of persons suffering from acute febrile nasal and naso-pharyngeal catarrh and found the bacillus coryzæ segmentosus, an organism which, morphologically and on artificial cultivation, is certainly allied to the diphtheria bacillus. Unfortunately, Dr. Cautley did not perform animal experiments or attempt any chemical tests. Certainly his organism was not a "Hofmann's bacillus," nor was it a typical diphtheria bacillus. Next, mention must be made of the numerous cases of fibrinous rhinitis in which diphtheria bacilli, or organisms indistinguishable from diphtheria bacilli, have been found. It must suffice to allude to the published works of Abbott, Freeman, Czemetshka, Concetti, Stamm, Meyer, Gerber and Podack, and Pluder. Rhinitis fibrinosa is a chronic affection, which, as a rule, remains local, and does not give rise to a clinically recognized diphtheria; but the bacillus occurring in this lesion is now generally acknowledged to be the Klebs-Loeffler bacillus. Further, bacilli resembling diphtheria bacilli, but not Hofmann's bacilli, are found with great frequency in many forms of ulceration of the skin, gangrene, stomatitis, cancrum oris, and noma. Together with Mr. J. W. W. Stephens, I have examined systematically a number of such cases, and have separated in all cases of cancrum oris and noma an organism so closely resembling Loeffler's bacillus that, although in most cases it was not virulent, I have not hesitated to place it provisionally with the diphtheria bacillus. Recently Freymuth and Petruschky have reported that, in cases of noma, they have obtained the diphtheria bacillus. I hope soon to find the necessary leisure to publish my own researches, but wish here to point out that, in many forms of chronic and impetiginous ulceration of the skin, it is easy to find bacilli resembling the diphtheria bacillus in all respects excepting virulence—so closely that I see no reason to separate them as pseudo forms, all the more since they all differ strikingly from Hofmann's bacillus, and since competent observers now begin to recognize that acid

formation, metachromatism, Neisser's staining reaction, appearances on gelatine and agar-agar, and virulence, are no more certain criteria for the diphtheria bacillus than appearances on gelatine, indol reaction, and virulence are certain criteria for the cholera vibrio. I have maintained for some time that bacilli actually, and not merely distantly, resembling the diphtheria bacillus, are found frequently in the throat and elsewhere in chronic ulceration, impetigo, cancrum oris, etc., and that in many cases, by continued growth, these bacilli may be so altered as to resemble the diphtheria bacillus still more closely, and even to acquire pathogenic properties. The diphtheria bacillus is, in my opinion, widely distributed—frequently in modified forms, it is true—but still in such forms which, except by artificial and imaginary criteria, such as would not be recognized in the case of other micro-organisms, cannot be separated from the Klebs-Loeffler bacillus, which, even under the best conditions, is a highly polymorphic organism. I therefore consider the work of Dr. Todd of all the greater importance, since it is a further contribution to the view, which is gradually gaining ground, that the diphtheria bacillus is found in many lesions which are not "diphtheria," and that the various tests, generally enumerated, do not suffice to distinguish the various modifications from the "text-book variety" of the Klebs-Loeffler bacillus. It is unnecessary to draw attention to the bearing which such a view has upon the etiology and pathology of diphtheria.

StClair Thomson.

LARYNX, &C.

Barnet, L. E. (Dunedin).—*Removal of a Foreign Body from the Left Bronchus of a Child.*¹ "Australasian Med. Gazette," June 20, 1898.

REPORT of a case of impaction of a portion of the antenna of a cray fish, one inch long and one inch in diameter, in the left bronchus of an infant. Owing to there not being any history pointing to the probability of such a foreign body being present, great difficulty was experienced in diagnosing the obstruction, as, when tracheotomy had been performed, the probe passed freely through the obstruction into the left bronchus; after several attempts it was successfully extracted, and the patient did well. The portion of antenna had been swallowed with the bristly segmented hair pointing upwards, which, whilst facilitating passage downwards, rendered nugatory all efforts of expulsion.

StGeorge Reid.

Fraenkel.—*Pathological Specimens of Larynx due to Measles.* (Biologische Abtheilung des ärztlichen Verein, Hamburg, June, 1898.) "Münchener Med. Woch.," 1898, No. 28.

THE preparations showed deep ulceration on the vocal cords and over the arytenoid cartilages, which extended to the perichondrium and cartilage, causing partial necrosis. One preparation showed a funnel-shaped ulcer at the anterior commissure, at the base of which the necrotic thyroid cartilage could be seen and felt. Another preparation showed, in addition to necrotic changes on the posterior pharyngeal wall, necrosis of the mucous membrane over both vocal processes of the arytenoids, with the necrosed cartilage lying adjacent.

Condition, if recovery ensues, is associated with hoarseness or difficulty in breathing. It forms a parallel to the processes observed in some cases of typhoid, and is due to invasion of pyogenic microbes from the surface. He observed four cases in one epidemic, and two in another.

Guild.

¹ Read before the Annual Meeting of the No. 2 Branch of the British Medical Association.