

Carrière.—*A Case of Cancer of the Œsophagus. Difficulties of Differential Diagnosis.* "Arch. Clin. de Bordeaux," Jan., 1897.

THIS is the description of a case of mediastinal tumour presenting physical signs which rendered diagnosis difficult. The symptoms appeared suddenly, after a severe mental emotion. Œsophageal obstruction was present, and paralysis of the left vocal cord. At the same time the heart was pushed down, and dulness was present about the first and second costal interspaces on the left side, and this was accompanied by auscultatory signs of aortic constriction, as well as evidence elsewhere of arteriosclerosis. The right radial pulse was diminished in volume and delayed in time. The œsophagus was impermeable to the passage of a bougie—a circumstance that seemed to exclude a mere narrowing of that tube from external pressure. Moreover, no pulsation was detected over the dull area, although bruit was present. The interest of this problem in diagnosis is largely dependent on the details of the various physical signs, all of which cannot be reproduced here.

Post-mortem.—All these signs were fully explained by the extent and situation of an extensive cancer of the œsophagus, together with masses of affected glands. The aorta was found to be greatly narrowed by external pressure.

Ernest Waggett.

NOSE, & C.

Bergeat, H. (Munich).—*Asymmetry of the Bony Choanæ.* "Archiv für Laryngologie und Rhinologie," Band IV., Heft 3.

THIS paper is based on the examination of the skulls in the Anatomical and Pathological Institute of Munich. The collection included about one thousand two hundred human skulls, several dozens of various apes, and about one hundred of other mammals, chiefly carnivora, including sixty-eight dogs' skulls.

(A) *Mammals with Elongated Skulls.*—Striking asymmetry of the choanæ was present in the single specimens examined of the skull of a sheep and of a badger, in two of the five skulls of foxes, and in nine of the sixty-eight dogs' skulls. Of this series of dogs' skulls, twenty-three belonged to the large races, with eight examples of asymmetry, while in the forty-five belonging to the smaller races the deformity was observed only once.

In the foregoing instances the asymmetry was localized chiefly at the lower edge of the choanæ; the posterior edge of the hard palate being situated further forward, the one-half of the palate seemed shortened. It was only exceptionally, however, that a loss of surface of the corresponding horizontal palate process could be recognized with certainty, the diminution from before backwards being equalized by a gain from side to side. In addition, the pterygoid bone sometimes underwent a lateral displacement on the same or opposite side. Finally, there might be deviation of the posterior edge of the septum.

In almost every specimen presenting asymmetrical choanæ there were irregularities of the skull to a lesser or greater degree, e.g., one condyloid process or glenoid fossa was pushed further backwards.

(B) *Apes.*—Without exception, all the skulls of large apes presented marked asymmetry of the choanæ, those of the smaller varieties, on the other hand, only exceptionally and to a slight degree. The form of asymmetry, as also of the choanæ, varied in all the species.

(C) *Man.*—It is necessary to distinguish (1) the asymmetrical position of the choanæ as a whole; (2) the asymmetry or inequality of the two choanæ.

The asymmetrical position may be brought about in various ways, *e.g.*, in consequence of bony absorption the neighbourhood of one condyloid process sinks into the cranial cavity, and the corresponding half of the skull comes to occupy a lower level than the other half: the septum is no longer vertical, and one choana lies somewhat above the other.

The inequality or real asymmetry of the choana has been found in 10 per cent. of the specimens examined by the author.

The commonest and most characteristic type is that in which one pterygoid process is more horizontal, *i.e.*, inclined more downwards and outwards, so that the rounding, breadth, and height of the corresponding choana in its upper part are lessened. The loss is balanced by the deeper position of the floor. Numerous details regarding this and other types are given.

The skulls of a large number of fetuses and newly-born infants were examined, but no example of choanal asymmetry was discovered.

The author distinguishes the following etiological factors:—

1. Unequal action of mechanical and statical forces when the bones of the head are insufficiently consolidated, *e.g.*, prolonged lying on one side, wryneck, osteomalacia.

2. Primary irregularities of the parts enclosing the choanæ.

3. Secondary displacements of the sphenoid and vomer in consequence of the asymmetrical growth of the rest of the skull.

4. Anthropological factors—thus: in an entire series of six skulls from Abyssinia and Upper Egypt the right choana was found prolonged upwards, without the presence of any other striking abnormality.

The practical points in connection with asymmetry of the choanæ are: its relation to asymmetry of the whole skull, to inequality of the Eustachian cushions and of the fosse of Rosenmüller, to asymmetry in the naso-pharynx, hard and soft palate, upper jaw, and, lastly, to the unequal width of the nose and deformities of the septum.

The author has also examined numerous unmacerated specimens, but they have not yielded nearly so remarkable results as the bony preparations.

Finally, he described several examples of asymmetry due to pathological conditions.

A. B. Kelly.

Keyser (Breslau).—*Relation of Ozæna to Adenoids.* "Wien. Klin. Rundschau," 1897, No. 9.

OUT of twenty-nine cases of ozæna (ages between six and nineteen) the author in twenty-three did not find any hypertrophy of the pharyngeal tonsil (adenoids); in six cases there was a slight notice of it. So he says: Is there any explanation—or, at least, any acceptable hypothesis—for this exclusive relation between ozæna and adenoids? The author thinks one is forced to accept that the ozæna is connected with certain irregularities of the constitution, through which is caused the incomplete development of the lymphatic plexus of the throat. An expression of such irregularities of the constitution, we may consider in ozæna characteristic peculiarities of the form and growth of the cranial bone. In spite of it, he thinks that the theory of Abel is quite acceptable, and that the bacillus mucosus, or any other special parasite, may be wanted to produce the ozæna. [Grünwald related, some time ago, two cases of ozæna cured by operation of adenoids. The author mentions these two cases, with the remark that this cure is very improbable. But the reporter, some time ago, also operated upon two large adenoids, and, after the operation, noticed a remarkable improvement of the simultaneous ozæna in these two cases.—*Rep.*]

R. Sachs.

W

Lacoarret.—*The Inferior Turbinate ; its Anatomical and Pathological Identity ; its Hypertrophy and Benign Degenerations.* “Rev. Hebd. de Laryng., Rhinol., et Otol.,” Feb. 27, 1897.

THE author points out that, unlike the other turbinates, the inferior forms part of the embryonic buccal cavity, and is not a mere reduplication of the walls of the olfactory groove. Evidence of this origin is found in the character of the mucous membrane, which resembles that of the pharynx in possessing adenoid tissue and muscle fibres. Just as anatomically it is not a part of the ethmoid, like the other turbinates, so pathologically it differs from those bodies in the manner of its degeneration. The initial stage of its process of degeneration is inflammatory, characterized by a redness and swelling wholly reduced by cocaine. Hypertrophy succeeds; the swelling is still reduced by cocaine, but not completely so. The hypertrophied body may be smooth or papillated. This stage may pass to the pure myxomatous degeneration, smooth or papillated. The swollen body is now of a yellowish or greyish colour, soft and compressible, but not reduced in size by cocaine. The fibro-myxomatous degeneration is equally unreduced by cocaine, but it is firmer in consistence and is not yellow, but has more or less of a pearly whiteness. Both in naked-eye appearance as well as in microscopic detail, each stage differs from lesions of a similar nature in the other turbinates, and this fact accords with the separate development and the anatomical identity of the inferior turbinates.

Ernest Waggett.

Macintyre.—*The Use of the X Rays and Fluorescent Screens in the Nasal and Pharyngeal Regions.* “Arch. Intern. de Lar., Otol., et Rhin.,” Jan. and Feb., 1897.

FIGURES are given indicating the method of obtaining shadows on the fluorescent screen from observation, either directly or with the laryngeal mirror. The screen takes the form of a tongue depressor of glass, covered on one side with the fluorescent salt. The platino-cyanides are extremely poisonous, and should be covered with a thin sheet of aluminium.

Ernest Waggett.

Piaget (Grenoble).—*The Means of Defence in the Nasal Fosse against Invasion by Micro-organisms.* (“Les Moyens de Défense,” etc.) “Annal. des Mal. de l’Or., du Lar.,” etc., Feb., 1897.

THE author corroborates the statements of previous writers with regard to the aseptic condition of the nasal fossæ.

Culture experiments with the nasal mucus of animals immediately after death gave negative results in fifteen out of thirty-eight cases. The author considers that the positive results were, in the majority of instances, due to accidental contamination. The bactericidal action of nasal mucus in vitro forms the subject of a number of experiments which are here detailed.

The method employed was the inoculation of tubes of nasal mucus from which plate cultivations were made after a certain interval. Cultivations for comparison were made from inoculations in bouillon. Streptococcus, staphylococcus aureus, bacillus coli, Eberth’s bacillus, bacillus pyocyaneus, and Loeffler’s bacillus were used.

A large number of experiments were not made in each case, but the results are sufficient to show that a very marked bactericidal action is exerted by the mucus against all the organisms mentioned with exception of bacillus pyocyaneus.

In many instances complete sterility was obtained. Previous work has shown that nasal mucus is fatal to anthrax bacilli, and its destructive action on Loeffler’s bacillus is shown by these experiments to be “very intense.”

The aseptic condition of the nasal fossæ is attributable to more than one line of defence, but of these the bactericidal action of the mucus is pre-eminent, as proved by its action in vitro. At the same time this power is not without its limits, and the number of bacilli inoculated influences the results of experiment. Moreover, the intensity of the action varies with different species of micro-organism.

Ernest Waggett.

Ribary, U.—*Clinical and Anatomical Contributions to the Study of Rhinitis Sicca Anterior.* "Arch. für Laryng. und Rhinol.," Band IV., Heft 3.

IN 1889, Siebenmann directed attention to a peculiar affection of the cartilaginous nasal septum, which he termed rhinitis sicca, and which he regarded as an important etiological factor in epistaxis, and in ulcers and perforations of the cartilaginous septum. The author has studied the condition in Prof. Siebenmann's polyclinic, and now presents a detailed account of the results of his investigations.

Rhinitis sicca anterior appears as a dry catarrh; the term is applicable only to those cases in which the affection is limited to the mucous membrane of the cartilaginous septum. Xanthosis of the nasal mucous membrane, as described by Zuckerkandl, corresponds to a certain stage of rhinitis sicca anterior; similar conditions have been referred to by Voltolini and Hajek.

The author finds that of the patients in the polyclinic suffering from nasal disease about ten per cent. had rhinitis sicca anterior. They were mostly young people, and chiefly females.

A very full account is given of the methods employed and the appearances observed in the microscopical investigation. The more important conclusions are summarized below.

In the mucous membrane numerous cells, fatty granular cells and scanty eosinophil cells, undergoing hyaline degeneration, are found. In addition, a great deal of pigment is scattered through the mucous membrane partly within and partly outside the cells. The pigment must be regarded as hæmatogenous (hæmatoidin); the reddish-brown colour with carbolic fuchsin is a specially characteristic reaction. In the mucus of the transformed mucosa, one or several layers of a peculiar substance are found, which is deposited in and upon the superficial layer of cells. This shows in its relation to stains the greatest similarity to kerato-hyalin; most probably its products of decomposition give rise to the characteristic smell of atrophic nasal mucous membrane; it is, in any case, the cause of the glossiness of the secretion on mucous membranes affected with dry catarrh. The depressions in the diseased mucous membrane visible to the naked eye correspond only exceptionally to dilated ducts of mucous glands; they are produced as a rule by peculiar folding of the epithelial covering.

Contrary to what is generally believed, the normal mucous membrane of the cartilaginous septum is covered with ciliated epithelium almost as far as the membranous septum. In the disease in question, however, the ciliated is converted into pavement epithelium. A similar change takes place in atrophic rhinitis. Rhinitis sicca anterior may, therefore, be regarded as atrophic rhinitis confined to the septum.

The etiology is much the same as in dry catarrhs of the upper air passages; dust appears to be one of the chief causes. Predisposition also plays a part. Crusts form in the vestibule, especially on the cartilaginous septum, and give rise to a feeling of tension, which causes violent sneezing and leads to the habit of picking the nose. In consequence of the frequent injury of the mucous membrane thus produced, erosions, epistaxis, and small ulcers result. When the septum is deviated the rhinitis sicca is found on the convex surface.

As to epistaxis, after discussing the chief views on the subject, the author shows

that, while writers are almost unanimous as to the usual site of the bleeding, namely, the anterior part of the septum, they are not agreed as to the cause. He maintains that the mucous membrane of the septum is not more vascular than that of the turbinates, that it is not thinner than that of the other nasal walls, and that it is not more firmly adherent to the underlying structures. The cause of septal hæmorrhages, in his opinion, is that the anterior part of the septum is much more frequently exposed to injuries, especially in cases of rhinitis sicca anterior, in consequence of the formation of crusts.

The erosions originating in rhinitis sicca anterior either heal or lead to polypoid excrescences (bleeding polypus of the septum), or pass more deeply, and give rise to ulcerative processes.

The stages in the formation of perforating ulcer of the septum, according to Siebenmann, are :—1. Rhinitis sicca anterior. 2. Traumatic erosion. 3. Deeper ulceration of the mucous membrane. 4. Perforation.

The injury to the septum caused by rhinitis sicca anterior also exposes the patient to infection, which may be conveyed by the finger-nails, dirty handkerchiefs, or the inspired air. Michelson and others have proved that tubercular infection can only take place when the bacilli are unusually abundant in the nose, or when its mucous membrane has been injured. Heryng also considers that nasal tuberculosis is due to local infection, predisposing causes being catarrhal conditions of the mucosa, formation of crusts, dryness, and erosions due to the finger-nail. In the majority of the cases published the cartilaginous septum has been the seat of disease. Of six hundred and twenty-one patients in the Basle Polyclinic with diseases of the nose, five had nasal tuberculosis. In all of these the site was identical with that of rhinitis sicca anterior, and the clinical histories showed that formation of crusts had preceded the swelling of the septum.

Primary syphilis of the nasal mucous membrane may also be a consequence of rhinitis sicca anterior. In the twenty-seven cases of primary syphilis of the nose collected by Seifert, the septum was affected in several.

The author is also convinced that erysipelas of the face, which usually starts from the nose, finds its entrance at a spot on the cartilaginous septum where the mucous membrane has been eroded in consequence of rhinitis sicca anterior.

The so-called idiopathic phlegmon of the nasal septum may possibly have a similar origin.

Rhinitis sicca anterior is diagnosed by a varnished-like appearance of the septum, with formation of dry crusts, and scabs which adhere firmly to the mucous membrane; when this condition has been long present the glossy covering is coloured with blood (xanthosis of Zuckermandl). Erosions are seldom absent. When the covering mentioned is softened and removed the surface of the mucosa is found to be traversed by fine, shallow depressions and folds. There is no infiltration unless one of the infective diseases above referred to is present. When there is a considerable loss of tissue the edges of the ulcers are not raised and do not slope steeply; if there is a perforation the edge presents a gradual thinning; in tuberculosis and syphilis, on the other hand, there is infiltration of the floor of the ulcer and of the edges.

The treatment of acute rhinitis sicca anterior should be undertaken as soon as possible: when it becomes chronic a return to the normal condition is not to be looked for. No permanent success has followed the transplantation of normal ciliated epithelium (Czerny). The patient should soften the crusts several times daily and cover the affected area with zinc or Hebra's ointment, containing ten per cent. of subnitrate of bismuth. In other cases, especially in children, yellow or white mercurial ointment has been of service.

A. B. Kelly.

Rethi, L. (Vienna).—*Mishaps after Nasal Operations.* "Archiv für Laryng- und Rhinol.," Band IV., Heft 3.

AFTER a nasal operation it is not uncommon for the patient to suffer from headache, vomiting, fever, fainting, angina lacunaris, transient amaurosis, delirium, epileptic seizures, and increase of reflex neurosis already present. Reflex phenomena which have not hitherto existed may also be produced, *e.g.*, attacks of sneezing, spasm of the glottis, vertigo, neuralgia, unilateral Graves' disease. Serious mishaps occur exceedingly rarely, *e.g.*, infection of the wound in the nose leading to erysipelas, phlegmon and diphtheria, to pyæmia and septicæmia, or to meningitis.

The following is a case of this nature which was observed by the author. A man, aged sixty-two, had been troubled with nasal obstruction for several years. When first examined by Rethi both nasal fossæ were found completely filled with mucous polypi. On that (July 15th) and the two succeeding days a number of the growths were removed. The patient was allowed to rest on the 18th. On the two following days more polypi and a great part of the degenerated mucous membrane covering the middle turbinates were removed.

On the 21st the patient complained of headache, and there was a slight rise of temperature. Two days later he entered the hospital and his condition was as follows:—He lay still, rousing himself only when called. Temp., 38·8. Left pupil did not react to light; the right, slowly. Left naso-labial fold almost obliterated. Right arm partially paralyzed; at the elbow-joint, painful. On the right thigh above the knee, a red, elevated area two decimètres in diameter, the periphery being yellowish brown. A similar spot below the right patella and right inguinal region, and another area on the ulnar side of the right forearm. He swallowed easily. Urine contained albumen and blood casts.

On the 25th his temperature was 38·2, and his pulse weak: the red areas had faded; the paresis of the right arm had increased. That evening he died.

The *post-mortem* examination showed that there had been a pyosepticæmia, with hæmorrhagic nephritis, suppuration in the subcutaneous cellular tissue and in the joints, thrombosis of the veins of the pia mater, and purulent meningitis. It is of interest that the peripheral suppurations occurred only on the side of the body (the opposite) corresponding to the cerebral affection.

The author has found only one case of nasal polypi recorded in which after operation pyæmia set in with a fatal termination. A few cases are known, however, in which meningitis followed the applications of the galvano-cautery, especially to the middle turbinate.

The rarity of such mishaps is astonishing when we consider the intimate connection between the blood and lymphatic vessels of the nose and those of the brain; also when we take into account the number and variety of micro-organisms present in the nose. This apparent anomaly can be explained only by assuming that some unknown provision exists which protects the organism from infection.

A. B. Kelly.

Rethi, L. (Vienna).—*Cure of Ozæna with Electrolysis.* "Wien. Klin. Rundschau," 1897, No. 10.

THE author considers electrolysis as a specific remedy against ozæna. He relates two cases, treated with electrolysis, which were completely cured (?) in a very short time.

R. Sachs.

Schmidt, Moritz.—*Further Experiences in the Treatment of Irregularities of the Nasal Septum by means of Electric Saws.* "Archiv für Laryngologie und Rhinologie," Band V.

THE author considers that simple swellings of the mucous membrane and scanty remains of the pharyngeal tonsil can be gradually diminished, so that they cease to

impede the air current, by practising nasal respiration perseveringly; cartilaginous and bony projections, on the other hand, are not affected by such simple means, but demand operative procedures. Of these, electrolysis is one of the best and safest in the author's opinion, but objectionable on account of its tediousness.

During the last three years one hundred and fifty operations have been performed under the author's supervision by means of electric saws. The results obtained have been highly satisfactory.

The instruments should be boiled in soda solution. Special disinfection of the field of operation is not necessary, as it cannot be thorough. Not only should the part that is to be operated upon be thoroughly anæsthetized, but the opposite side of the septum should also be painted with cocaine in case of unavoidable perforation.

The instrument should be chosen according to the hardness and size of the deviation. In patients over twenty-five years of age, and in younger persons in whom the projection passes far backwards, the trephine is to be preferred. On the other hand, the undulating saw may be used in all who have still an apparently cartilaginous septum, and in older individuals when the change in shape only involves the anterior part of the septum. When in doubt, choose the trephine, which will carry one through in all cases—the saw sometimes cuts with difficulty or not at all, owing to an unsuspected ossification. The advantage of the saw is that the operation can be completed in one act. Very large deviations, especially when extending far back, and crests and deviations close above the floor of the nose, are best removed with the trephine.

In removing a deviation or crest the saw should describe an arc passing inwards, upwards, and outwards. The operation takes two or three seconds.

The bleeding is usually insignificant, but when troublesome the nose is plugged with gauze. If it continues longer than fifteen minutes after the application of the plug the gauze is removed, the blood cleaned out, and a very small spurting artery is usually discovered. A pledget saturated with ferropyrin is then applied to the spot, and the nasal fossa again plugged with gauze.

The wound takes about four weeks to heal, and somewhat longer if the septum has been perforated.

The objections to the method are the cost of the apparatus and the profuse hæmorrhage that occasionally takes place. The author has only had two cases of erysipelas, and in one of these the patient was to blame.

Contra-indications are: a fresh attack of rhinitis, and suppurating affections of the skin lining the vestibule.

A. B. Kelly.

Vinci.—*Eucaïne and Cocaine.* Soc. Thérapeutique. "Presse Méd.," March 20, 1897.

THE toxic dose of eucaïne for the rabbit is fifteen to twenty centigrammes; of cocaine, ten to twelve centigrammes.

Ernest Waggott.

LARYNX.

Colomb, B. A.—*Rupture of Alveolar Abscess into the Larynx; Œdema of the Glottis; Laryngotomy under Difficulties.* "New Orleans Med. Journ.," Mar., 1897.

THE abscess was causing dyspnoea, sufficient to alarm, when it ruptured into the larynx, causing complete cessation of respiration. Crico-laryngotomy was