

of the eye is a reliable sign of the absence of pus in the antrum of Highmore. This can only be decided by a thorough investigation of numerous cases of empyema of the antrum. Should it be found that pus in the antrum always prevents the electric light from penetrating from the mouth into the eye, then this method will always be a valuable means of diagnosis, although only capable of giving a negative result.⁶ Should, however, it be found that the presence of pus in the antrum does not prevent the electric light from penetrating, then this method is of no value as a thoroughly *reliable* means of diagnosis. In any case, the circumstance that one can, by introducing an electric lamp into the mouth, illuminate the nose and its adjacent cavities will always give transillumination of the bones of the face importance as a means of investigation. It remains for future investigators to decide its importance as a method of diagnosis of empyema antri Highmori.

RETROSPECT OF THE YEAR 1893.

DISEASES OF THE PHARYNX, PALATE, TONSILS, &c.

A SURVEY of the contents of the JOURNAL OF LARYNGOLOGY for 1893, relating to the special diseases of which it treats, emphasizes the need for such a special work as this. From every part of the world all that is worth recording is found in its pages, which as a reference serve to keep readers abreast of the progress of the times in these special subjects. Its founders have therefore to be congratulated on its success, which in no other year has been better sustained than during 1893.

The elaborate and exhaustive reports of British (Home and Colonial), American and Continental Societies and Congresses form a striking feature, and represent what is often most interesting and invaluable to the readers of its pages.

DISEASES OF THE PALATE AND UVULA.

In a communication of some interest, Carpenter (London) records several cases of facial paralysis of rheumatic origin, in one of which there existed paralysis of the palate, supposed by the author to be due to implication of the petrosal branches of the facial above the geniculate ganglion. The point is well sustained, although it is opposed to the views of Horsley, Jackson, and Gowers, who maintain that paralysis of the palate is produced by disease at the side of the medulla oblongata, damaging the hypoglossal and spinal accessory nerves.

Mr. Lennox Browne refers to a case of palatal paralysis, associated with defect in vision after diphtheritic rhinitis.

Malformations of the palate, consisting in hiatus in the anterior pillars,

⁶ Should future investigations confirm my experience, viz., that in no case of *vivid* illumination of the face (as described above) does the one pupil remain dark while the other is illuminated (that is, in healthy individuals), this phenomenon, when exhibited in thin, slightly-built individuals, might give a positive result, viz., be a proof of the presence of pus in the antrum.

are noted by Broekant (Ghent). Bonnier refers to an opportunity he had of watching the mechanism of deglutition and opening of the Eustachian tubes in a patient whose palate had been destroyed by disease. The tubes opened during deglutition and the drum participated in the pharyngeal vacuum, which the action of the palate could not explain in this case. By the approximation of the nasal alæ to the septum during deglutition a vacuum in the whole naso-pharyngeal space was produced when the act of swallowing was performed. Thus the tubes could open during the ordinary phenomena of yawning and deglutition in the absence of the peri-staphylinæ and palatine aponeurosis. A vesicular eruption on the palate is claimed by Shelly to be frequently observed in the early stages of influenza, and may be looked upon as a reliable symptom of the disease. Lublinski reports a case of papilloma, the size of a cherry, situated on the edge of the hard and soft palate. Syphilitic ulceration of the palate is referred to. Attention is drawn to the fact that wide-spread destruction may rapidly take place unless radical treatment is applied to the early site of the ulceration, which is on its posterior aspect, and therefore concealed from view. It is necessary, therefore, in throat syphilis to carefully scrutinize the state of the post-nasum, and, if crust formation is there present, to remove this and apply suitable remedies. When perforation of the palate has taken place, much may yet be done in the way of obviating wider destruction by assiduous attention to the post-nasum—*e.g.*, by swabbing with Lugol's solution, or a four per cent. solution of chromic acid.

An interesting paper by Cartaz will be found on complete adhesions of the arch of the palate and pharynx. In most instances a result of syphilis, yet scrofula, diphtheria, lupus, and rhinoscleroma have been cited as occasional causes. The functional disturbances are fully described—speech, deglutition and respiration being profoundly affected. It is easy to detach the parts, but difficult to preserve the opening through these indurated cicatricial masses. [In the worst cases of adhesions a minute aperture is found in the middle line, through which a probe can be passed; working laterally from this with a bistoury, free separation is made. To keep the palate free, a triangular plate of vulcanite, suspended between the parts by threads drawn through the nose, is worn without much discomfort to the patient.—REP.]

UVULA.

From elongated uvula several symptoms of unusual occurrence are referred to and worthy of repetition. Parker refers to vomiting suffered from by a singer for two weeks, where amputation of the uvula brought about recovery and improvement in the use of the voice. The reviewer met with a case of inspiratory stridor in a man aged fifty-six, who possessed an extremely elongated uvula. Uvulotomy at once removed the cause of the irritation and obstruction in the larynx.

Papillomatous growths of the palatal arches and uvula are referred to by Wagner as usually found on the posterior pillars.

Berens found in three thousand throats eighty-four cases where the uvula presented some anomaly—

Completely separate	2
Worm-like shreds	8
Supernumerary	4
Deeply cleft ..	14
Attached to other parts	2
Absence	2
Fish-tail shaped	39
Pendulum	2
Hypertrophied	11

He does not consider the uvula acts as a dropping stone to keep the epiglottis and larynx moist, as in several cases where the uvula was absent no noticeable dryness was observed.

PHARYNX.

Pharyngeal reflex neuroses are referred to, and diverse origins enumerated. As a frequent cause, hyperplasia of the lingual tonsil is referred to by Lennox Browne, Bauer, &c. Mayo Collier describes an interesting case of reflex stricture of the œsophagus, which may here be referred to. This occurred in a patient suffering from cancer of the liver. Swallowing was impossible, although an œsophageal bougie could be readily passed into the stomach. Want of appetite is a prominent symptom in cancer of the liver.

Bewley describes a case of reflex pharyngeal spasm, ending fatally in six days. There was hiccough at irregular intervals, and swallowing caused great distress. *Post-mortem* the pharynx, larynx and œsophagus were found normal. Indefinite cerebral lesions were noted, while clinically it was considered to resemble a violent chorea of the muscular apparatus of the pharynx, larynx and diaphragm.

The reviewer can refer to a case which resembles, in some respects at least, Bewley's case. The patient, a male aged thirty-five, suddenly found himself, six weeks ago, unable to swallow, and in the interval since has lost two stones in weight. He is extremely weak, and suffers from insomnia. Pulse, 180; valvular disease; liver, normal. He complains of being unable to perform the first act of swallowing. The saliva overnight accumulates on the back of the throat, and on awakening he has the greatest difficulty in bringing it up. The posterior pillars of the fauces are greatly swollen and injected. The œsophageal bougie can be readily introduced into the stomach. The tongue can be protruded normally, and articulation is perfect. No evident paralysis of palate, motor or sensory. Swallowing still difficult. Strength diminishing.

Meyjes, in an article on the treatment of chronic catarrh of the pharynx, points out that the cause of the discomfort on speaking must be sought for (*a*) in the lateral bands of granular pharyngitis; (*b*) in enlargement of the tonsils, or (*c*) in the lingual tonsil. Konitzer gives an account of a hairy pharyngeal polypus hanging from the anterior pharyngeal wall. This consisted of fat, covered by outer integument. Pharyngomycosis is several times referred to. An interesting case is alluded to by Dundas Grant, who recommends the galvano-cautery. Cheatham also refers to this condition, and recommends for removal (which is

(difficult) forceps, curette, or galvano-cautery. Garel attributes its presence and distribution to catarrhal conditions of the pharynx. In order of frequency the sites are as follows—the tonsils, base of the tongue, posterior and lateral walls of the pharynx, faucial pillars, naso-pharyngeal vault, and nasal fossæ. Small points, mushroom-like tufts, and yellow plaques are the forms assumed. It is to be contra-distinguished from lacunar tonsillitis, pultaceous angina, herpetic angina, and diphtheria. A moderately strong solution of chromic acid is generally effective in ridding the parts affected of the leptothrix, or whatever the true parasite of this affection is. An interesting case of cicatrix of the pharynx, involving the epiglottis in a child, arising after a severe scarlatinous sore throat, is referred to. Roswell Park mentions a case of malignant pharyngeal polypus, where Senn's recommendation—to isolate the trachea, and pass a rubber tube over the balance of the neck—was adopted. Venous hæmorrhage was excessive, and the patient died from shock next day. A case of primary tuberculosis of the pharynx is noted by Köster, rebellious to treatment. There were no pulmonary changes. Heryng, in a similar case, but where pulmonary and laryngeal implications were present, cured the pharynx (lactic acid, curettement) in one week.

TONSILS (FAUCIAL).

An extensive literature, as usual, is found devoted to the tonsils, from which, however, nothing strikingly new can be extracted. All the principal diseases of the tonsil have received notice—viz., acute and chronic inflammations, syphilitic and tubercular lesions; and tumours of various kinds are fully recorded. Sallard divides acute inflammations of the tonsils into—

Non-suppurative tonsillitis.

True " " (parenchymatous).

Peritonsillitis (pharyngeal and lingual).

Anomalous forms of tonsillitis.

Generally speaking, he considers tonsillitis as a general infectious disorder, a fever of which the angina is only a manifestation. Quaipe, on the other hand, finds in an irritation applied to the mucous membrane surrounding the tonsil a cause of tonsillar disease, just as disease in the intestinal mucosa induces disease in Peyer's patches. Radcliffe attempts to prove that there are two conditions underlying enlarged tonsils. In one the hypertrophy is that of dilatation without consolidation, with enlarged blood-vessels, where tonsillotomy may cause severe hæmorrhage, and occurs in children. In the other (principally adult form) the enlargement follows repeated attacks of inflammation in a healthy subject. Here there is induration, and tonsillotomy is safe as regards hæmorrhage.

Newcomb advises salol in acute tonsillitis and incision if peri-amygdalar infiltration has set in—incision high up in front of and above the pillars, even if there is no pus, which rarely occurs before the fourth day. Leland treats recurrent tonsillitis by dividing the tissues between the crypts by knife, scissors, and hooks, and so reducing its size. Ruault uses a specially devised pair of cutting forceps with which to reduce the

size of the tonsil piecemeal. Where tonsillotomy in the usual way is impracticable such a procedure may be acceptable, and forms an advance on galvano-cautery, especially if the diseased tonsil is of any size. Even with these forceps more than one sitting is found necessary. Lediard (Carlisle) recommends a curved probe, pointed bistoury, and vulsellum (Symes' method) for the removal of enlarged tonsils on the grounds that the guillotine may be too small to encircle large growths, and that some mouths are too small to receive the guillotine into position. [These objections are true in fact. In patients where the ramus of the lower jaw is unusually short a difficulty is found in getting the ring of the guillotine on to the base of the tonsil, and the cut being made a different level, part of the diseased tonsil is left behind to re-inflame perhaps and always to hamper the action of the faucial pillars. In this condition we find a cause for unsuccessful tonsillotomy.—REV.]

Three original cases of calculus of the tonsil are mentioned by Lecocq : (1) in the sub-tonsillar fossette found in the fibro-muscular wall of the pharynx without ulceration ; (2) one in the same region with abscess ; (3) calculus of tonsil, abscess and ulceration. Several notices of hæmorrhage after tonsillotomy are observed. Butts describes a forceps for controlling this, of the usual design, while Daubarn advises surrounding the bleeding surface with a strong purse-string ligature, placed *in situ* by a large semi-circular needle, removing the ligature in from twenty to twenty-four hours. Wingrave's allusion to shrinkage of the tonsils as a complication of ozæna is worthy of note, so that further experience may be brought forward to establish the truth of the association.

MALIGNANT GROWTHS OF THE TONSILS.

Macintyre, after describing two cases of malignant disease of the tonsil, one an epithelioma, the other a sarcoma, both of which were removed *per orem*, strongly advocates operation through the mouth, especially when the growth is early recognized. Barker and Grant support the contention. Incision in the mucosa is carried round the tonsil, and the growth is then enucleated. The majority of operators adopt an external incision or incisions ; several are found to agree that a single incision from the lobe of the ear to the hyoid bone affords sufficient room for removal of a malignant tonsil. The use of lactic acid injected into a sarcomatous tonsil was found by Ingals successful in arresting the course of the growth, the pain, and discharge. Parenchymatous injections in tonsillar enlargements are recommended by various authors, *e.g.*, carbolic acid, chlorine water, iodine, etc.

Mackenzie (Edinburgh) gives a list of two hundred and thirty tonsillotomies with interesting statistics.

Newman (Glasgow), in book form, gives a most valuable contribution to the study of new growths of the tonsils.

TONSIL (LINGUAL).

A gradually increasing literature is observed, directed towards the several pathological states of the lingual tonsil and their treatment. While examining the pharyngo-glossus it is important at the same time

to scrutinize the borders of this region, for, as pointed out by Macintyre, cracks, fissures, and tubercles causing pain shooting up to the ear, have their site there and require treatment. While nothing new is observed in the communications under the above heading, yet they have been useful in diffusing more widely a knowledge of this most important condition. Several present original observations of interest. Pharyngeal tenesmus is referred to by Lennox Browne. Joal, in three cases, observed spitting of blood, which was seen with the laryngoscope to come from small ulcers and vascular ruptures, situated on the hypertrophied lingual tonsil.

Garowitsch describes a condition of acute inflammation of the lingual tonsil, associated with a similar condition of the epiglottis. Dyspnœa is associated with this state. With the laryngoscope the lingual tonsil and epiglottis are observed enlarged and reddened. In rare cases, inflammation of the lingual glands follows. The majority of contributors rely for treatment of lingual tonsillar hypertrophy upon the galvano-cautery. The possibility both of hæmorrhage and absorption of septic matter from the cautery wounds is to be kept in view.

ADENOID VEGETATIONS OF THE NASO-PHARYNX.

The majority of authors agree that the disease is not scrofulous, and is often observed in patients without any other sign of scrofula, but sometimes both affections are combined. An important point is that tubercular bacilli have been found in these growths, although caseation as a result has never been observed. No new observation is discovered as to the etiology of these growths. Inflammation and catarrh here, as in the case of the other lymphoid structures surrounding the pharynx, are no doubt effected by similar causes. The loose investiture and want of a capsule permits of freer growth, and freer absorption from it by the lymphatics, in the case of injurious products being lodged in the substance of the growths. This facility accounts for the constant association of cervical adenitis and adenoids.

Important discussions on adenoid vegetations of the naso-pharynx at several centres. At the Australasian Medical Congress, held in Sydney in 1892, Drs. Barrett, Webster, Hamilton and Quaife contribute largely to the literature of the subject, and each refers to the prevalence of these growths amongst individuals at the antipodes. From statistics given by these authors the same conditions are found to hold as amongst a home population. The information is interesting, and aids in elucidating or narrowing down the etiology of post-nasal growths. We have no reason to suppose, from the facts these authors adduce, that climatic influences are at work in their causation, and are brought back to causes that are pretty generally recognized—viz., inherent vulnerability on the part of individuals, and insanitary conditions in their midst. Throughout Australasia precisely the same complications of the condition appear to be met with, while the treatment carried out follows closely on the measures adopted in Europe.

At a discussion over a paper read by Edmund Owen on post-nasal growths in children, at a meeting of the Harveian Society of London,

British thought on the subject, and methods of treatment, were fully set forth.

Owen relies upon the facies adenoidea as sufficiently diagnostic, and recommends chloroform with the hanging head. The finger suffices for the majority. Butlin lost one case in seven hundred and fifty operations. Lennox Browne dwelt upon the association of enlarged tonsils and adenoids, and referred to the association of laryngismus, barking cough of puberty, pertussis, granular pharyngitis, catarrhal laryngitis, and even laryngeal growths, with adenoids. Hovel prefers the forceps under an anæsthetic for removal. Spicer referred to concomitant intra-nasal conditions requiring treatment. Semon drew attention to the influence of obstruction upon general health, mental development and the formation of the face, the danger of ear complications, and the liability to and seriousness of infectious diseases, especially diphtheria and scarlet fever, in the presence of these growths. Finger-nail procedures he did not countenance. Milligan considers naso-pharyngeal adenoids a local manifestation of a dyscrasia akin to scrofula, and responsible for at least fifty per cent. of catarrhal diseases in childhood. He further strongly advocates their removal in the presence of recurring deafness and ear-ache. Wingrave, in considering the question of anæsthesia in the removal of adenoids, is strongly in favour of nitrous oxide anæsthesia, during which at the same time the tonsils may be removed. As a cause of epistaxis in childhood, Drinkwater instances adenoids—a fact which the reviewer can corroborate from his own experience. Another observer recognizes the presence of adenoids in children as the cause of a purulent discharge from the nose at that age.

THE TONGUE.

Isolated cases of subjective sensations in the mouth, especially in women, occasionally come before the practitioner for treatment. Pain and abnormal sensations are experienced in the tongue, although no ostensible factor of production is present in the organ. Antipyrin is of some use, as well as mouth washes of boracic acid, chlorate of potash, etc., after which the tongue can be painted over with Lugol's solution.

A case of ulcer of the tongue in a syphilitic subject, much aggravated by the abuse of tobacco and spirits, is quoted, where the curette was freely used to rid the surface of effete products first of all, and then the application of the galvano-cautery to stimulate the ulcers towards repair, and abolish pain by destroying terminal nerve twigs. The use of tobacco and spirits was prohibited, and the diet restricted to milk food. A mouth wash of boracic acid, to be used after meals and during the intervals, was prescribed. The treatment was successful in curing the condition—which had lasted for four years, rebellious to all procedures—in fourteen days. A chancre of the tongue of characteristic appearance, accompanied by enlarged glands and followed by secondary symptoms, is reported by Eustace (Beluchistan), who also refers to a case of phagadenic ulceration of the tongue, which destroyed the organ down to the phrenum.

Two cases of idiopathic inflammation of the tongue are referred to. In one case leeching was effective in reducing the swelling ; in the other,

where the organ protruded beyond the lips, its size was reduced by the excision of a triangular piece of tissue, and the edges brought together.

A case of successful treatment of epithelioma of the tongue by electrolysis is fully reported by Draispul, of St. Petersburg. The disease presented itself in the form of an ulcer on the right side of the tongue, with enlarged painless glands on the right side of the neck. A piece of tissue removed showed the structure of an epithelioma. In six sittings the diseased area was destroyed by electrolysis. The glands in the neck disappeared without treatment, and eleven months after the tongue was sound.

DIPHTHERIA.

This immense subject has a correspondingly extensive literature devoted to its consideration and treatment. The bacillus which Klebs discovered and Loeffler familiarized us with is found practically to be difficult of recognition, and yet at this period on its presence alone must the diagnosis of diphtheria be made. A considerable proportion of pseudo-membranous and exudative inflammations of the throat and upper air passages commonly considered as diphtheria, and having the anatomical appearances found in diphtheria, are not true diphtheria ; *vice versa*, cases often wanting in the diphtheritic appearances turn out afterwards to be diphtheria. It would be well, therefore, if the health departments in our midst put in force the practice of the Health Department of New York, which makes use of bacterial cultures for diagnosis. The physician in attendance is furnished free of cost with a culture tube and swab, and with the simple directions necessary for their use, at any of the druggists whose addresses are given in the circular. The diagnosis will be ready in every case by noon the following day. Cases of false diphtheria are not attended to by the department. True diphtheria comes under the regulations covering contagious diseases.

Nowhere is the general practitioner more at fault than in the diagnosis of cases of membranous sore throat. Follicular tonsillitis in severe forms is put down as diphtheria, families are disturbed beyond measure, drains are dug up and overhauled, and the physician comes off with flying colours after the recovery of three or four of a household without a fatality.

Sanitary authorities, generally speaking, agree that diphtheria and its prevalence is not influenced so much as typhoid sickness and death-rate are by improved sanitary arrangements. In the face of the utter uncertainty from this source, prevention is to be aimed at. The disease is infectious, therefore let the diagnosis be made at once in the laboratory. Systematic examination of children at schools where diphtheria is present ought to be made compulsory.

Koplik refers to forms of true diphtheria which simulate simple catarrhal angina. In cases without membrane Klebs-Loeffler bacilli were found. Other cases of diphtheria without characteristic local manifestations may resemble angina, so that clinically, from mere inspection, it is impossible to say whether they are diphtheritic or not.

It would be difficult, and perhaps an unnecessary task, to enter into the various methods of treatment suggested by various authors ; besides,

nothing new is to be found to warrant any such detailed reference. Chromic acid is somewhere mentioned as a local application ; its active diffusible properties favour its use in this case.

SUB-MAXILLARY GLAND.

Several cases of calculus in Wharton's duct are referred to ; Robertson records a case met with in a bushman. The patient presented a large quadrilateral swelling under the right lower jaw ; inside the mouth, under the tongue, a breach was observed in the mucous membrane of the floor of the mouth, through which a stone was readily felt and seen. After enlarging the aperture with the aid of an elevator, the calculus was removed, and found to be the size of a small walnut. It weighed two and a half drachms. Mumps of the sub-maxillary gland is recorded by Wertheimer, in a case of epidemic parotitis, the parotids being healthy. Wacker also refers to contagious swelling of the sub-maxillary gland.

It would be an easy matter to add to the above brief review, so elaborately and scientifically are many of the subjects under discussion rendered. What has been said represents a mere gleanings, necessarily confined within limits, of the valuable store of literary material devoted to these special subjects contained in the volume of the *Journal* for 1893.

Wm. Robertson.

NASO-PHARYNX.

DURING the past year there has been a fair sprinkling of cases and other work done in this region, but by far the larger proportion are of no great interest, and there is such a lack of original work that one arrives at the belief that we have reached the end of our tether, for the present at all events. Adenoid vegetations have received a large share of attention, and discussions have been frequent, but again nothing new has been brought forward ; the respective advocates of curette, forceps and finger-nail have had their opinions well ventilated, and have left us where we were, though nitrous oxide seems to be coming forward as an anæsthetic for this operation and is very well spoken of, its great disadvantage to most being the short period of anæsthesia. Another death from secondary hæmorrhage after removal of adenoids is reported from America, making the fifth from all sources, but as there was no autopsy we are none the wiser as to its usual cause. Dionisio reports a case of enuresis cured by removal of post-nasal growths.

Donath confirms the observations of Stiede regarding the thickening frequently (twenty-two per cent. Nücke) occurring amongst all persons of the palatine suture, sometimes broad and sometimes narrow, always symmetrical, probably rachitic in origin, and more common amongst criminals and the insane.

Good results are reported of the lactic acid treatment of palatine tuberculosis.

Kenates gives a new method of operation for cleft palate, by which means he lengthens and broadens the velum and uvula. It consists in piercing the uvula with a two-edged knife, and forming a flap extending on