

ABSTRACTS.

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Authors of Original Communications on Oto-laryngology in other Journals are invited to send a copy, or two reprints, to the JOURNAL OF LARYNGOLOGY. If they are willing, at the same time, to submit their own abstract (in English, French, Italian or German) it will be welcomed.

NOSE.

Fulminating Ethmoiditis with Metastasis.—Ira Frank. "The Laryngoscope," July, 1919, p. 425.

Frank records the case of a male, aged nineteen, who was seen twenty-four hours after the onset of an attack of grippe. The following day general frontal headache was complained of. By the fifth morning the frontal pain was sufficiently intense to suggest sinus disease. Next day the nasal secretion became slightly blood-tinged. On the eighth day œdema was apparent in the upper and lower lids. Frank was now called in and found the right eye completely closed. Fluctuation was not apparent. Intranasal examination revealed an almost total occlusion of the right naris. No pus was visible, but there was an ooze of pinkish serum from the swollen turbinates. After careful application of cocaine and adrenalin Frank was able to remove the anterior third of the right middle turbinate. This freed a large quantity of pus. On the following day the temperature reached 104.2° F., and there was no diminution the patient's discomfort. A Killian incision was now made over the right eye. In the process of raising the periosteum from the orbital plate of the ethmoid bone there was a sudden escape of pus. The ethmoid cells were thoroughly curetted and a large quantity of pus liberated. Relief from the headache was almost immediate, but the temperature varied between 100° and 104° F. A severe pain located in the left shoulder on the day following the second operation. Blood-culture proved to be sterile. The shoulder was explored with a needle, but no pus was found. On the following day a large submuscular abscess around the shoulder was opened and drained (pure culture of streptococcus). Patient left the hospital entirely well.

J. S. Fraser.

Tuberculosis of the Sphenoid Sinuses.—John D. Kernan, Jr. "The Laryngoscope," May, 1919, p. 276.

Kernan records the case of a female, aged thirty-one, who, six months before, had been seized by an illness, the chief symptoms of which were prostration, chills and fever. Two weeks after the beginning of the illness she started to have a pain in her head, localised chiefly in the occipital region, but radiating toward each mastoid process. Later it extended to the orbital regions. On the day of her admission the pain became more severe and localised itself in the right ear. The patient had lost twenty pounds in six months. She had had two healthy children, two miscarriages and several stillborn children. Examination showed

optic neuritis, more marked on the right side, with total loss of sight on this side. There was pleural thickening over right upper lobe posteriorly. A polypoid mass hung in the region of the posterior end of the right middle turbinate and a mucopurulent discharge appeared far back in the right nasal cleft. On transillumination the right antrum only appeared dark. A rough mass having the appearance of adenoids was seen in the nasopharynx. Left drum membrane red and bulging. X-ray of sinuses: Frontal and maxillary sinuses normal. There was, however, a distinct clouding of the right ethmoid region, with dulling of the bony outline about the right sphenoidal fissure. The lateral view showed marked clouding of the sphenoidal sinuses. Temperature normal to 101° F. The otitis cleared up. Wassermann negative. Posterior end of middle turbinate on the right side was resected and the anterior wall of the right sphenoid sinus was removed. The sinus was found to be full of an extremely friable tissue resembling granulation-tissue. On section this was pronounced to be tuberculous. A Denker operation was performed on the right side, the anterior and inner walls of the right antrum being removed. The antrum appeared to be healthy except posteriorly, where the mucous membrane was thick and cedematous. The right middle turbinate was removed and the posterior ethmoid cells found to be full of pathological material, their bony walls being necrotic. The floor and anterior wall of both sphenoidal sinuses were in a similar condition. The vomer, the pterygoid processes and perpendicular portion of the palate bone on the right side were all involved. The mass hanging from the roof of the nasopharynx, which had the appearance of adenoids, likewise proved to be tuberculous tissue. This was removed with an adenotome and curettes.

Progress.—The patient was free from pain next day. The wound in the mouth healed promptly. *J. S. Fraser.*

Orbital Abscess and Exophthalmos due to Intranasal Suppurative Processes.—Derrick T. Vail. "The Laryngoscope," May, 1919, p. 263.

Thirty years ago nearly all abscess formations of the orbit were diagnosed as either primary or metastatic. The true conception seems to be that the abscess process first begins in a locked-up accessory nasal sinus. The least resisting wall of that sinus gives way and the pus finds a way out of its sinus confines into the adjacent space. If the pus from the primarily affected accessory nasal sinus breaks through the orbital wall of the sinus we have, first, elevation of the periosteum of the orbit, and later on perforation of the periosteum so that the pus is free to flood the tissues of the orbit. There may now be a speedy recovery on the part of the swollen nasal mucosa so that the turbinated regions as viewed with the rhinoscope are not very abnormal in appearance. The position of the proptosed eyeball usually declares which sinus in the nose was the seat of the primary abscess. Vail records four cases: (1) Exophthalmos and thrombosis of cavernous sinus from sphenoid abscess. Death. (2) Exophthalmos from abscess of the posterior ethmoid sinus in which the eyeball was pushed straight forward. Recovery. (3) Exophthalmos from abscess of the anterior ethmoid sinuses in which the eyeball was extruded forward and towards the temple. Death. (4) Exophthalmos from abscess of the frontal sinus in which the eyeball was extruded to less extent and pushed downward. Recovery.

J. S. Fraser.

Reflections on the Dangers of Radical Frontal Operations.—P. Terrier.
 “Revue Méd. de la Suisse Romande,” September, 1919.

The author recognises only two methods of radical operation, namely, the Caldwell-Luc and the Killian. After pointing out the advantages and disadvantages of each of the operations and the difficulties and dangers attending them (in which there is nothing new) he reports a case:

Male, aged forty-eight, with a swelling at the left internal orbital angle, polypi in the nose and very free discharge of pus.

Operations performed:

- (1) Removal of polypi, which was followed by acute tonsillitis.
- (2) Caldwell-Luc operation on both antra.
- (3) Killian operation on left frontal sinus.

Death a few days later from purulent basal meningitis, most marked round the sella turcica, the optic nerves and the chiasma and extending back to the base of the cerebellum. On the convexity of the brain the pia mater and arachnoid were œdematous.

Cerebro-spinal fluid was purulent and the sinuses at the base of the skull contained clots. No lesion could be found in the bone, no fissure; the lamina cribrosa was intact and the dura mater covering it normal.

Arthur J. Hutchison.

Submucous Resection of the Nasal Septum.—John A. Cavanaugh.
 “The Laryngoscope,” August, 1919, p. 463.

Cavanaugh describes his method of operating. He makes the usual incision on the convex side and elevates the mucoperichondrium. He then uses his “cartilage shave” to remove a strip of cartilage, leaving the perichondrium of the mucous membrane of the opposite side exposed. He then introduces his septum forceps, of which the inner surface of one blade is roughened and the other smooth. The roughened blade is introduced next to the cartilage from which the mucous membrane has been elevated, while the other blade rests upon the mucous membrane of the opposite nostril. In this way the ethmoid plate can be fractured in several places. This portion of the septum can be “freely and easily pushed into the position desired.” The “septum shave” resembles Ballenger’s swivel knife except for the fact that, in place of the knife blade, there is a small dredger which cuts sideways into and through the cartilage. The article is illustrated.

J. S. Fraser.

E.A.R.

Anatomical and Clinical Study of Osteitis of the Tip of the Petrous.—
Lavage of Meningeal Spaces in Cases of Meningitis.—Bellin,
Aloin and Vernet. “Lyon Chirurgical,” July–August, 1918, p. 455.

The authors present the following case mainly to explain their method of washing out the meninges, but also as an interesting example of osteitis of the tip of the petrous bone.

A soldier was admitted to hospital December 1, 1916, with wounds of the face by shell explosion causing destruction of the right eye and a left facial paralysis from a lesion of the parotid. In addition there was diminution of sensation in the left cornea and face and stenosis of the

left auditory meatus. Curetting of left mastoid December 8. Plastic operation on left meatus March 30, 1917. Recovery uneventful.

In June, after a period of headaches, sudden signs of meningitis appeared, Kernig, stiffness of neck, rise of temperature, etc. Lumbar puncture showed clear fluid containing streptococci. After several punctures, by June 7 his state had become worse. There was clouding of his mental faculties and definite true aphasia. Next day still aphasic. Paralysis of the right arm. Diagnosis of left temporo-sphenoidal abscess made. Mastoid reopened, but bone, sinus and meninges found healthy. No sign of pus. It was decided to go for the temporo-sphenoidal lobe, and accordingly a fresh incision and exposure of dura in temporal region was performed under strictly aseptic conditions. Puncture of the brain in this region evacuated about 1 c.c. of blood-stained fluid. Puncture of the ventricle gave clear fluid. The same evening patient recovered consciousness and could speak distinctly. Had one or two Jacksonian fits. For several days the improvement continued. Arm merely a little feeble.

On 12th suddenly much worse; temperature raised, neck rigidity aggravated. Lumbar puncture showed numerous streptococci; puncture of abscess-cavity gave no pus. Ventricle again tapped. In view of the bad prognosis it was decided to attempt to wash through the meninges, and accordingly some serum coloured with methylene-blue was injected through the lumbar needle. In a few moments the blue fluid appeared through the needle in the ventricle. There was a slight dyspnoea at this point, which, however, did not last long. The washing was continued a few minutes and the wound re-closed. There was considerable improvement in every respect for about four days. The cerebro-spinal fluid showed no streptococci for some days. However, the symptoms later reappeared. Lavage was again carried out but without much improvement, and the patient died on June 18.

Post-mortem examination showed slight purulent exudate over convexity of brain. Section of the left temporal lobe revealed an abscess-cavity $2\frac{1}{2}$ cm. in diameter above and in front of the descending horn of the lateral ventricle, with which it did not, however, communicate. The cavity was empty. The right side of the brain showed nothing special. In the region of the left Gasserian ganglion there was a false membrane and the dura was here very adherent to the bone. After removal two abscess-cavities were found in the petrous bone, one near the carotid canal, the other above the porus acusticus.

It was evident from the *post-mortem* findings that the case had been hopeless from the start, but the improvement after lavage of the ventricles was so marked that the authors regard it as a very valuable therapeutic measure. When it is remembered that the meningitis was due to a streptococcus and that lavage caused a disappearance of those for several days from the cerebro-spinal fluid the case must be regarded as distinctly encouraging. The point at which the brain is tapped is at 3 cm. above the external auditory meatus and midway along a line joining the nasion and the inion. A small trephine opening is made at this point and a needle with an obturator is pushed in at right angles to the brain to a distance of 3 to 4 cm. As soon as the ventricle is reached a flow of liquid will occur when the obturator is withdrawn. A lumbar puncture is next performed and a quantity of serum coloured with methylene-blue is introduced, preferably through the lumbar needle. For further details the reader is referred to the original paper. *J. K. Milne Dickie.*

On the Opportuneness of an Early Surgical Intervention in Suppurative Otitis accompanied by Meningeal Reaction.—Caldera, C. "Boll. di. Prof. Grazzi," fasc. 8, anno xxxvi.

It is not uncommon to get symptoms of meningitis in the course of an acute otitis media in children. The symptoms rapidly disappear after perforation or paracentesis of the drum membrane and proper drainage. This syndrome has been given the name of "meningismus."

The author reports a case of this type occurring in an adult in whom paracentesis was carried out without improvement. The symptoms, however, disappeared as soon as the mastoid was opened.

The patient, a soldier, aged twenty-seven, was admitted to hospital with bronchitis in the course of which he developed suddenly acute pain in the left ear. After four days of pain some discharge appeared, stopping again after forty-eight hours. Admitted to otological department May 15, 1918. Examination showed a good deal of desquamation in the external auditory meatus, and reddening and bulging of the drum-head without any visible perforation. Mastoid tenderness. Other ear normal. Paracentesis of the membrane was carried out immediately under local anæsthesia and considerable discharge escaped and continued next day. However, the pain in the ear and the mastoid tenderness continued and the temperature remained above normal but without rigors. On the 17th the condition of the ear was much the same and the patient had severe headache, rigidity of the neck, Kernig's sign, and vomited several times. The mastoid was opened. Soft parts normal, cortex of moderate thickness, cells healthy; only the antrum contained some purulent secretion. No granulations. The cavity was packed with gauze. Lumbar puncture was performed and the cerebro-spinal fluid found to be clear and under normal pressure. Microscopic contents normal.

Next day the temperature was below normal. The patient was much improved in every way. The Kernig was barely perceptible; there was no headache, no neck stiffness, and no vomiting. Recovery was uneventful except for an attack of sciatica and later a slight pleurisy.

Speculating on the cause of the meningeal symptoms, Caldera suggests the possibility of a special anatomical peculiarity in which the purulent secretions came in contact with the dura mater, which had proved a barrier to the infection but allowed the toxins to penetrate it.

J. K. Milne Dickie.

Chronic Purulent Otitis Media, Thrombosis and Suppuration of the Transverse Sinus, Extradural Abscess and Cerebellar Abscess; Operation and Recovery.—H. Tanaka (Takasaki, Japan). "The Laryngoscope," August, 1919, p. 491.

Female, aged fourteen. First seen August 14, 1918. Chronic suppurative otitis media (left) after sea-bathing at the age of six. Several attacks of vertigo during last few months. Severe chill accompanied by a rise of temperature to 40° C., and nausea and vomiting on day of admission. *Examination*: No nystagmus. Headache severe in left frontal region. Mastoid tenderness present. *Operation*: Under local anæsthesia; duration, five minutes (*sic*). The antrum was filled with cholesteatoma; sinus exposed, normal. On second day after operation patient had a chill. Five days later Tanaka exposed the transverse sinus. It was yellow and showed no pulsation. Puncturing proved that it contained pus. Probe inserted; brought about a sluggish bleeding

(culture showed pure *Staphylococcus albus* from sinus pus). At the third operation pus was found in middle fossa (extra-dural abscess). A week later the patient fell into a stupor from which she could not be aroused. Pupils dilated, equal on both sides and did not react to light. Horizontal rotary nystagmus. Temperature 38° C., pulse 65. Neck stiff; knee-jerks absent. Lumbar puncture showed clear fluid. Slight motor aphasia; choked discs on each side. During next six weeks Tanaka notes severe headache, nausea, vomiting and comatose attacks accompanied by opisthotonos; speech disturbance; left abducens paralysis; amblyopia on the right side; slight nystagmus towards the left (diseased) side; ataxia of left extremities. A cerebellar abscess was evacuated at the fourth operation. A month later the wound closed but there was still some ataxia. The abducens paralysis almost entirely disappeared, but optic atrophy was found on ophthalmoscopy.

J. S. Fraser.

The Use of the Pitch-range Audiometer in Otology.—S. W. Dean and C. C. Bunch. "The Laryngoscope," August, 1919, p. 453.

Two years ago Dean decided that the methods of testing the tonal ranges used in his clinic must be improved upon. Prof. Seashore suggested the appointment of a research assistant to work in otology and psychology to solve this problem. Bunch was appointed, and the new instrument is the result of his work. Dean admits that it is not a perfected machine. It is, however, far superior to any other method. As perimetry has developed ophthalmology, so may this method develop otology. In Dean's clinic the pitch-range audiometer has already replaced the tuning-forks. It is a great time-saver. The instrument was used during the war to test men for radio service, and many unsuspected defective individuals were found who had passed the other regular examinations for hearing. The audiometer measures the tonal range from 30 to 10,000 double vibrations per second. Defects unsuspected after an examination with the Bezold forks (covering over an hour) are detected in two or three minutes with this instrument. A tone gap of three or four notes only, lying in an area between two tuning-forks, will be definitely demonstrated by this instrument. The findings have been confirmed with the monochord and piano. The instrument is excellent for rapidly and accurately determining malingering. Curves made on successive days should be identical unless the ear condition is changing or the patient is malingering. In testing the hearing of one ear it is always necessary to use a noise apparatus in the other.

Dean gives a brief description of the instrument. If we take a magnet such as that used in a telephone receiver and attach to it another telephone receiver, and then lay a nail across the two prongs of the first receiver, we can hear a click in the other receiver when the nail is laid on and when it is taken off, as the result of the change in the electro-motive force caused by bridging the two points of the magnet.

The results obtained by this machine may be compared to perimetry, of the eye. Certain curves are suggestive at least of certain lesions. A machine completely standardised would give the same results in Europe and in America. If we mount this receiver magnet in front of a toothed wheel so that each prong of the magnet will fit snugly in front of one tooth of the wheel, then the wheel becomes a bridge as the nail was in our first illustration; the magnetic current completes a circuit from one cog to the other. Now if the wheel is revolved slowly the cogs gradually

recede from their magnetic points until they reach the maximum gap, and then the next pair of cogs will gradually make the bridge as before. The pitch of the tone may then be varied by varying the speed of the revolving wheel. The wheel is driven by a direct-current motor so adjusted as to produce any desired speed. (The article is illustrated.)

The noise of the machinery may be eliminated by placing the motor in some distant room and having electric control for the experimenter, who is seated in a quiet room with the patient. The patient holds the receiver to his ear, and indicates, by some noiseless method, that he hears the tones. The experimenter begins by throwing in the shunt a certain resistance which will give a strong tone in the receiver. The motor is then speeded up until the entire tonal range is covered. A convenient method of marking the graph is to have the intensity steps for the vertical scale and the frequencies recorded at the bottom as a horizontal scale. Fatigue is largely eliminated because the pitch of the tone is constantly changing, and the entire test should not require more than fifteen or twenty minutes, as compared with one hour for a complete test with tuning-forks.

J. S. Fraser.

Abducens Paralysis in Acute Suppurative Otitis Media with Mastoiditis.
—**Otis Stickney.** "The Laryngoscope," July, 1919, p. 395.

Stickney records two cases. *Case 1.*—Girl, aged six. A simple mastoid operation was performed. The cells were broken down. There was no carious destruction of the tegmen. A small area of the dura was exposed and found normal. The child began to improve on the following day. The double vision entirely disappeared in two weeks.

Case 2.—Female, aged thirty-four. At operation the small cells contained only serum and granulations. There was, however, one cavity filled with pus. No exposure was made of the dura or lateral sinus. Following the operation there was no improvement in the ocular condition. The original mastoid incision was reopened and the tegmen removed as far forward as possible. The dura was congested and very adherent; there was a plastic exudate to be seen in this region. A gauze drain was introduced between the dura and the bone. In five days the ear discharge ceased altogether. Ten days after the second operation there was decided improvement in the abduction of her eye.

J. S. Fraser.

Lateral Sinus Endophlebitis without Thrombosis.—**Dauidin Clavand.**
"Journ. de Laryngologie," September 15, 1919.

There are abortive types of endophlebitis which never proceed to thrombosis, and in these types the diagnosis is extremely difficult.

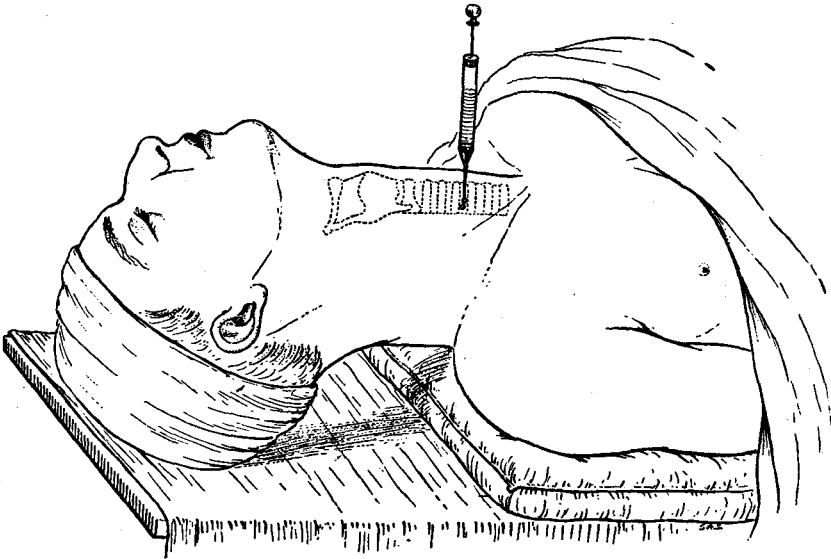
At operation, on laying bare the sinus-wall there is nothing to suggest thrombosis, and the patient recovers from all signs of a systemic infection, although the sinus is not incised. Obviously the mastoid operation and sinus exposure has not been useless. The explanation probably lies in the simple drainage of septic foci which are incipient in the extradural space and fully developed in the bone itself. This conservative method should always be adopted in such cases; the technique makes it easier for the surgeon to open the sinus later, if necessary, without delay or a long anæsthesia.

H. Lawson Whale.

TRACHEA.

Tranquil Tracheotomy, by Injecting Cocaine within the Windpipe.—
StClair Thomson. Epitome from the "Brit. Med. Journ.,"
 October 11, 1919, p. 460.

This technical improvement for rendering tracheotomy quieter, simpler and safer has been employed by the author and his pupils for the last six years, so that the method has been well tested in scores of cases before being published in detail, which is now for the first time. It is equally useful if the tracheotomy is performed under a general or a local anæsthesia. After trials with a 5 per cent. solution of cocaine it has been found that a solution of $2\frac{1}{2}$ per cent. is as effective. It is used as follows: An ordinary hypodermic syringe is charged with about twenty drops of a



$2\frac{1}{2}$ per cent. solution of cocaine. As soon as ever the tracheal rings are laid bare the syringe is grasped, as one does a pen, with the forefinger about one inch from the extremity of the needle, and with this the windpipe is sharply stabbed between two rings. The middle, ring and little fingers are resting on the neck, and they prevent the point from penetrating more than a $\frac{1}{4}$ to $\frac{1}{2}$ inch within the lumen of the trachea. The cocaine solution is injected into the cavity of the windpipe, some five to fifteen drops, and the needle is sharply withdrawn.

The liquid in the windpipe at once gives rise to a slight, stuffy cough. It causes no spasm or distress, and as it trickles down towards the region which endoscopists know to be the sensitive spot of this area, viz. the carina at the bifurcation of the trachea, this tickling cough soon ceases. If there is no great urgency, ten minutes should be allowed to elapse, the time being occupied by clearing the front of the trachea, checking all bleeding, preparing the tube and so forth. At the end of that time the incision can be made into the trachea and the cannula introduced without pain, spasm, or even the slightest cough as quietly and smoothly as the original incision through the skin. The calm with which this proceeding takes place is in striking contrast with the agitated, hurried and often bloody and dangerous operation of former days. *StClair Thomson.*

MISCELLANEOUS.

Limitations of the Diagnostic Value of the Skiagram in Diseases of the Nose and Ear.—John Guttman. "The Laryngoscope," August, 1919, p. 472.

Guttman comes to the following conclusions as regards the value of the skiagram in diseases of the accessory sinuses: (1) The skiagram will prove the presence or absence of a sinus. (2) It will show the form and size of a sinus. (3) A skiagram showing a clear sinus is an undoubted sign of a healthy, normal condition of that sinus. (4) The pathological condition of a sinus can be corroborated by a skiagram when the usual subjective and objective symptoms point in that direction, but the presence of a shadow alone without such subjective and objective symptoms is not sufficient proof of the existence of such a pathological condition, nor is it in itself an indication for operative interference on that sinus.

In diseases of the middle ear the skiagram is far from having the same diagnostic value as it has in nasal accessory sinus suppuration. In the accessory sinuses a skiagram is of value mostly in chronic cases, but in mastoiditis the information gained from the X ray is most desirable in acute affections. In almost every case of acute purulent otitis media there is a coexisting involvement of the mastoid. A difference in appearance of the skiagrams of the two mastoid bones is not of much diagnostic significance, because when both mastoids are perfectly normal they may appear differently on the skiagram, this difference being due to differences in the anatomical construction of the two mastoid bones, one of which may be pneumatic and the other sclerotic. Cloudiness in the region of the antrum or mastoid cells in a case of purulent otitis media is not necessarily an indication for mastoidectomy. Such cases may become perfectly well without any operation. Negative findings, however, are of value because they show that the mastoid bone is not involved.

J. S. Fraser.

Hæmorrhage in Epidemic Influenza.—M. A. Goldstein. "The Laryngoscope," August, 1919, p. 447.

In the recent influenza epidemic a violent, persistent, and remarkably frequent epistaxis occurred as a prodrome or as an early symptom. Patients complained of a fulness in the head. The mucosa of the upper respiratory tract presented a diffusely congested, slightly swollen and dark-red injected appearance. The site of this epistaxis was invariably along the course of the septal artery. In sixteen cases blood-cultures were made from this septal point, and in five the presence of *Streptococcus hæmolyticus* was demonstrated. The cases in which the epistaxis occurred seemed to be those in which the most intense activity and more serious complications developed. Where this epistaxis was violent subsequent hæmorrhage appeared in other localities of the respiratory tract or in other organs of the body. Where epistaxis was found pneumonic complications were quickly presented. Where epistaxis was not controlled by the sero-logical therapy that was carried out, the end-result in the large majority of cases was fatal. In 1913 Goldstein conducted observations on the coagulation-time of the blood in patients operated on for resection of the septum, adenoids and tonsillectomy. Goldstein found that even in hæmophiliacs the coagulation-time following the administration of 10 c.c. of horse-serum was reduced from one to three minutes.

As the result of these observations a general order was issued to inject 10 c.c. of normal sterile horse-serum in all patients during the active "flu" epidemic as soon as epistaxis was observed. In sixty cases in which this serum treatment was promptly carried out no mortality was recorded. Even where severe pneumonia developed the patients recovered. Of twenty-two cases transferred to the pneumonia wards before the serum could be injected, fifteen were fatal.

In eight out of a series of over seventy cases of so-called myringitis hæmorrhagica the bacteriological culture of the contents of the blebs showed the presence of *Streptococcus hæmolyticus*. The fauces, pharynx and the tonsils in almost all of the cases exhibited the same mahogany-red, intensely injected mucous membrane, and swabs from these throats demonstrated the presence of *Streptococcus hæmolyticus*. Within twenty-four to thirty-six hours after the initial symptoms of influenza there was admixture of pure blood with the sputum—an indication of localised tracheal bleeding. In the women's wards menstrual hæmorrhage occurred almost as early in the symptoms-complex as epistaxis, irrespective of the normal menstrual period of each patient. There were also several cases of intense hæmaturia.

Goldstein believes that hæmorrhage, hæmolysis and the *Streptococcus hæmolyticus* must have some close pathological relationship and identity.

J. S. Fraser.

NOTES AND QUERIES.

DR. WILLIAM HILL.

We extract the following paragraph from a recent number of the *St. Mary's Hospital Gazette*, London:

"By the retirement of Dr. William Hill, after the completion of his full term of office, St. Mary's sustains a real loss. Dr. Hill's reputation as a laryngologist, more especially in the domain of endoscopy, extends far beyond the limits of his hospital. His work is familiar on the Continent and in America, and he is recognised as a pioneer in the more recent work on diseases of the gullet."

Mr. Nicol Rankin, M.B., and Mr. Archer Ryland, F.R.C.S.E., have been appointed Assistant Surgeons to the Central London Throat and Ear Hospital.

THE AMERICAN ACADEMY OF OPHTHALMOLOGY AND OTO-LARYNGOLOGY.

The Twenty-fourth Annual Meeting of the American Academy of Ophthalmology and Oto-Laryngology was held in Cleveland, Ohio, October 16 to 18, under the presidency of Dr. John M. Ingersoll, of Cleveland, Ohio. Three hundred American and a number of Canadian physicians were present.

The Twenty-fifth Anniversary will be held in Kansas City, October 14, 15, 16, 1920.

Officers for 1920 were elected as follows: President, Dr. L. M. Francis, Buffalo, N.Y.; Vice-President, Dr. Hal Foster, Kansas City, Mo.; Secretary, Dr. L. C. Peter, Philadelphia, Pa.; Treasurer, Dr. S. H. Large, Cleveland, Ohio; Chairman of Arrangement Committee, Dr. Hal Foster, Kansas City, Mo.; Chairman of Exhibit Committee, Dr. J. S. Lichtenberg, Kansas City, Mo.

OTOLOGICAL SECTION OF THE ROYAL SOCIETY OF MEDICINE.

The next meeting of this Section will be held on February 20, 1920. Secretaries: Mr. H. Buckland Jones and Mr. Lionel Colledge.

LARYNGOLOGICAL SECTION OF THE ROYAL SOCIETY OF MEDICINE.

The next meeting of this Section will be held on February 6, 1920. Secretaries: Dr. Irwin Moore and Mr. Charles W. Hope.