

ABSTRACTS

THE EAR.

The Petro-squamosal (Mastoid) Septum and its Clinical Significance.
O. KÖRNER, Rostock. (*Zeitschrift für Hals-, Nasen-, und Ohren-
heilkunde*, Bd. xvii., Heft 2, p. 137.)

This is a wall, originally duplex, separating the cells originating from the squamous antrum from those originating from the petrous one. It shows its presence if when, in a case of apical suppuration, we open up separately the apical cells and the "mastoid" antrum, the latter also containing pus; if we put one blade of a punch-forceps into the former and the other into the latter we grip between them bone and pneumatic tissue which may be quite normal. We can bite away the morsel and uncover the communication between the "mastoid" antrum which is really the "petrous" antrum, and the apical cells. This can be done without any danger to the descending part of the facial nerve.

JAMES DUNDAS-GRANT.

Mycotic Otitis Media. Professor CITELLI. (*L'Oto-Rhino-Laryngologie
Internationale*, May 1927.)

Two cases of mycotic infection of the middle ear, without similar infection of the meatus, in patients having a large open perforation due to old suppuration, are reported in this article.

The characteristics of this type of otitis media, which, the author thinks, has not been fully recognised, are:—

1. Mild, subacute course.
2. Scant, serous, non-fetid discharge, tending to disappear for a few days and then reappear.
3. Failure to respond to the usual treatment, in spite of the fact that the otitis is of a mild type, without osteitis.

The diagnosis is assisted by leaving the ear without treatment for a few days, when whitish flakes with black spots may often be found. Microscopical and cultural examination of this material will confirm the diagnosis.

Treatment consists in giving iodides internally and the local application of drops containing iodides. C. GILL-CAREY.

Abstracts

The Conservative Treatment of Chronic Otitis Media Purulenta. JOHN HORN, M.D., New York. (*Medical Journal and Record*, June 1927.)

Horn describes a form of treatment which he has employed for the past ten years, and claims "cures" in a large proportion of his cases. It consists in packing the meatus and middle ear with gauze impregnated with Credé's ointment. The formula he gives is:—Ungt. Credé (15 per cent. of collargol), lanolini and petrolati equal parts.

He considers the action is that of a local germicide. No details of cases are given.

N. S. CARRUTHERS.

A Glimpse into the Surgery of Abscess of the Brain. Sir CHARLES BALLANCE, K.C.M.G., F.R.C.S. (*Practitioner*, July 1927.)

Abscess of the brain is associated with certain injuries and diseases: (1) Injuries of the head; (2) Certain general infections, *e.g.* tubercle, influenza and enteric fever; (3) Certain local diseases other than those of the head, *e.g.* certain diseases of the lung; (4) Local cranial suppurations. At least one half of all brain abscesses come under class (4), and arise from suppuration in the mastoid cells or middle ear, and from infection of the nasal accessory sinuses. In the acute infections of these parts meningitis is a more common complication, whereas in the long-standing chronic cases, brain abscess is more apt to occur, the meningeal infection having time to be localised by adhesions.

The common situations of abscess are, the cerebellum, the temporo-sphenoidal lobe, and the frontal lobe. The author deprecates the misuse of the term "latent" with reference to the condition. "Symptoms not noticed, and symptoms not present are not synonymous terms." The signs of abscess are to be patiently looked for sometimes over a period of several days. The symptoms may be classified thus:—

- (1) Those due to the presence in the body of deep-seated pus independent of its locality, *e.g.* toxic symptoms: increase of white cells in the blood.
- (2) Those due to increase of tension within the closed cavity of the skull: *e.g.* headache, vomiting, optic neuritis.
- (3) Those due to irritation or suppression of function of particular parts of the brain.

Localising symptoms belong to the last class. Interference with the so-called naming centre is common in abscess of the left temporo-sphenoidal lobe in a right-handed person. Paralysis of the opposite side of the body may occur when a large temporo-sphenoidal abscess presses inwards towards the posterior end of the internal capsule. Paralysis of the 3rd nerve, as also disturbance of taste and smell, may be present.

The Ear

Cerebellar abscess is peculiarly insidious and often difficult to diagnose. Vertigo and nystagmus are common but labyrinthitis has to be excluded. Occipital headache, vomiting and emaciation are frequently seen. Inco-ordination and ipsilateral paresis may be present. Frontal lobe abscess generally arises from suppuration in the frontal sinus, and is generally situated in the white matter of the basal part of the first frontal convolution. When it occupies or presses upon the posterior end of the 3rd or 2nd left frontal convolution motor aphasia and motor agraphia may be present. With a chronic or subacute frontal lobe abscess there may be loss of the highest functions of the brain—ideation, memory, control, attention and judgment. In dealing with treatment Sir Charles emphasises the importance of following the abscess by its stalk and securing that as the path for drainage: "Its lumen presents a ready made channel with fibrous walls capable easily of enlargement, through which drainage can be effected."

T. RITCHIE RODGER.

Brain Abscess as a Complication of Middle-Ear Suppuration. JAMES HARPER, M.A., M.B. (*Practitioner*, February 1927.)

The symptoms of brain abscess are first discussed. The writer believes that the slow pulse often associated with the condition is due, not to the size of the abscess but to an increased intracranial pressure from the extension of the inflammation into the tissues outside the capsule of the abscess. The difficulties of diagnosis are increased if the case is seen when the abscess is in its latent stage, but even in the active stage symptoms are apt to be very vague. A definite conclusion can be arrived at only by a careful weighing up of what signs may be present and by a searching inquiry into the history. Several cases are described in detail to illustrate some of the difficulties of diagnosis.

T. RITCHIE RODGER.

Acute Temporo-sphenoidal Abscess following Acute Otitis Media. P. SAUER, Cologne. (*Zeitschrift für Hals-, Nasen-, und Ohrenheilk.*, Bd. xvii., Heft 2, p. 203.)

Two months before admission, the patient, aged 12, had severe pain in the right ear followed by discharge. For the first few days after admission the patient was doing well when suddenly severe headache and exhaustion developed. These were followed by vomiting, stiffness of the neck and positive Kernig. Lumbar puncture evacuated under high pressure a turbid fluid containing an abundance of leucocytes. Operation on the mastoid revealed extreme smallness of antrum, dense sclerosis of bone and complete absence of cells. An extensive extradural abscess was opened. Good progress was made and the patient was discharged from the wards.

Abstracts

A few days later she was readmitted on account of headache, vomiting and depression, without meningeal symptoms or nystagmus but with choked disc and retinal hæmorrhage. "Optomotor" nystagmus was absent on the left side. Right-sided temporo-sphenoidal abscess was suspected. There was no rise of temperature and no "compression" pulse. A further operation was carried out and bulging of healthy dura mater took place. Incision and dilatation by means of forceps gave vent to 250 c.cm. of thin pus. Steady improvement and recovery followed. Although the case was one of abscess, the symptoms pointed to meningitis. The acuteness of the development of the abscess is unusual. Körner is quoted as pointing out that in the majority of cases otitic cerebral abscess is not brought about through disease of the mucous lining of the temporal bone cavities, but through disease of the bone itself. The bone may, according to Manasse, appear perfectly healthy to the naked eye, but on microscopical examination may be found to have all its vascular canals full of pus-corpuscles.

(The recent death of that highly respected research worker and clinical otologist, Professor Preysing, gives a special interest to this case which was under his personal care and is here described in detail by his assistant, Dr Paul Sauer.) JAMES DUNDAS-GRANT.

Cerebellar Abscess in an Elderly Woman. W. S. THACKER-NEVILLE.
(*Lancet*, 1927, Vol. i., p. 490.)

The author describes the case of a woman aged 71. In September 1926 she had a short attack of earache. In December she developed symptoms apparently of abdominal origin. On 7th January there was pain about the right ear, and dizziness with vomiting. Operation showed pus in a cancellous mastoid, an empty lateral sinus, and an abscess with a well-defined wall, in the cerebellum. Neumann's labyrinth operation was also performed. The patient died on 9th January. MACLEOD YEARSLEY.

Primary Jugular Bulb Thrombosis with Numerous Metastatic Infections: Operation; Recovery. Dr H. S. WIEDER and Dr W. BATES.
(*Laryngoscope*, Vol. xxxvii., No. 1, p. 48.)

A coloured male, aged 26, gave a history of a cold two or three weeks previously, with pain and discharge from the right ear. In a few days the discharge almost ceased, but was followed by marked pain and diffuse swelling of the right side of the neck. His temperature was 101.4° F.; there was no evidence of mastoiditis. The temperature became irregular, going up to 105.4° F., with a leucocyte count of 19,750. A simple mastoid operation was done, with the possibility

The Ear

of a Bezold's mastoiditis in mind. A normal mastoid was found with merely some pus in the antrum. No pus in the neck. The lateral sinus was exposed high up and appeared to be normal as to colour and touch. Operation had no effect on the symptoms, but the temperature became more irregular and septic. He had a chill and his blood culture was positive for streptococcus hæmolyticus. Daily intravenous injections of 20 c.c. concentrated Pregl's iodine were given. No improvement followed, so the jugular vein was tied, mastoid wound reopened and lateral sinus incised. Blood flowed from the upper end, but towards the bulb a well-organised clot was found. Temperature remained septic, and the patient developed pain in the knee, both elbows, and right sacro-iliac joint, and the blood culture continued positive. Fluctuating swellings developed in the right sacro-iliac joint, both elbows, and right knee. These were incised, and the culture yielded a hæmolytic streptococcus. Recovery followed.

As a result of this case and several subsequent cases, the authors are convinced that Pregl's iodine administered intravenously is of marked benefit in streptococcal septicæmia, and is without any particular febrile reaction or danger except in endocarditis. If temperature persists after the administration of iodine, the primary focus has been insufficiently drained, or a secondary focus is present. It is suggested that the continuation of temperature after injection of Pregl's iodine in a case of streptococcal blood stream infection, be considered a definite sign of insufficient surgery. This is the third case where the primary infection was in the mastoid, and the sacro-iliac joints were the first places to show metastases. All three recovered with healing of the joint.

ANDREW CAMPBELL.

Two Cases of Cavernous Sinus Thrombosis associated with (1) Acute Purulent Otitis Media, (2) Mastoiditis. Dr W. C. BOWERS. (*Laryngoscope*, Vol. xxxvii., No. 5, p. 372.)

A male, aged 27 years, complained of pain in the left eye of one day's duration. The left drumhead was bulging and the eyelids were puffy. He was advised to come in for myringotomy but did not come till next day when the drumhead had ruptured. He felt chilly and there was pain over the left frontal region. The left eye was œdematous and there was marked proptosis. The right eye was also protruding. The cerebrospinal fluid was under pressure, uniformly cloudy, and contained 18,000 cells per cm. The culture was negative. The fundi showed dilated veins. He died the next day. The ear and cavernous sinus conditions were concomitant; within forty-eight hours of the first pain in the left ear, the patient died with symptoms of cavernous sinus thrombosis and meningitis.

Abstracts

The second case was a male, aged 33 years. He gave a history of intermittent ear discharge of four years' duration. Eight days previously, he felt chilly and had pain in the left ear. He was able to go to work in spite of some earache, but three days before admission he developed pains all over the head, with vertigo and a temperature of 102° to 104° F. On admission there was marked nystagmus to the right. The left ear showed a large polypus with profuse purulent discharge. The mastoid was tender. Conversation was heard at four feet; the labyrinth was active. Cerebrospinal fluid showed 25 cells per cm.; culture showed Gram-negative bacilli. On removal of the cortex, pus and gas escaped; the odour was that of colon bacilli, but culture was negative. The lateral sinus was collapsed, contained no blood-clot and the outer wall was necrotic. Free bleeding was obtained from both ends on insertion of a probe. There were a few granulations on the dura mater of the middle fossa. The jugular vein was not ligated. Two days later the cerebrospinal fluid showed 450 cells. There was ophthalmoplegia of the left eye and the veins of the fundus were congested. There was Kernig, stiff neck, restlessness, and headache. Death occurred three days after operation, with all the signs of meningitis and cavernous sinus thrombosis. This was a case in which involvement of the cavernous sinus probably took place through the petrosal sinus. The author has seen two other cases of cavernous sinus thrombosis, both following improper treatment of a nasal furuncle. These cases are almost always fatal. Three or four cases of spontaneous recovery have been reported, while one case of recovery after operation is cited. Cavernous sinus thrombosis as a complication of mastoiditis is very rare and it may be present without involvement of the lateral sinus or any eye symptoms.

There is a comprehensive bibliography. ANDREW CAMPBELL.

THE PHARYNX AND NASOPHARYNX.

Oral Lesions due to Vincent's Angina—What every Physician and Dentist should know about its Recognition and Treatment. JOSEPH COLT BLOODGOOD, M.D., Baltimore. (*Journ. Amer. Med. Assoc.*, 9th April 1927, Vol. lxxxviii., No. 15, p. 1142.)

The author states that up to 1900, 97 per cent. of the lesions of the mouth seen at Johns Hopkins Hospital were malignant. In his own clinic, since 1921, benign lesions of the mouth have increased from 50 to 75 per cent. He is convinced that Vincent's angina, especially, is on the increase. He has never found organisms of Vincent's angina in a mouth from which all the teeth had been extracted, and has not often seen it when the teeth are clean and smooth, the enamel exposed, the gums not receded, and pyorrhœa absent. Vincent's angina may be a secondary invader on a malignant

The Pharynx and Nasopharynx

lesion, tuberculosis, syphilis, or a traumatic condition, and is often associated with such general conditions as scurvy, pellagra, diabetes, or hypothyroidism. Sodium perborate is claimed to be a specific. This is used as a thick paste of chemically pure salt applied directly to the lesion and left for about five minutes, after which the mouth is rinsed with warm water. This may be followed by a gargle of sodium perborate two or three times a day.

ANGUS A. CAMPBELL.

Coincident Diphtheria and Vincent's Angina. ROBERT SPALDING SPRAY, Ph.D., Morgantown, W. Va. (*Journ. Amer. Med. Assoc.*, 16th April 1927, Vol. lxxxviii., No. 16, p. 1234.)

A married woman, with one child, was seen by four physicians, two of whom diagnosed diphtheria, and two Vincent's angina. A swab was sent to the city laboratory, where direct microscopic examination revealed myriads of spirochetes and fusiform bacilli. The following day cultures showed a very profuse culture of diphtheria bacilli. Antitoxin was given to the mother, the husband, and the child. The mother recovered, and no contact cases developed.

ANGUS A. CAMPBELL.

The Carrier of Virulent Diphtheria Bacilli. E. H. R. HARRIS, W. M. MACFARLANE and F. B. GILHESPY. (*Lancet*, 1927, Vol. ii., p. 646.)

The writers discuss this question and its relations to tonsillectomy. They insist upon the futility of local antiseptics and conclude as follows: It is generally agreed that local antiseptic or bactericidal applications to clear up the diphtheria carrier are useless, and diphtheria vaccines in their hands have shown no value. Tonsillectomy and removal of adenoids are procedures of much greater value. This opinion is supported by Thomson, Mann, and others. A series of authors is quoted showing that a negative result was obtainable in 91.3 per cent. within two weeks after tonsillectomy. Pilot is quoted as saying that the diphtheria bacillus is usually harboured in the tonsils and their removal generally terminates the carrier state. Tonsillectomy is not an ideal method, but is a rational and successful one. At the same time "there is possible objection, together with the other drawbacks, of a cutting operation under a general anæsthetic." The authors have no experience of the local application of X-rays or ultra-violet rays, for which good results have been claimed by Kahn and Stewart. They finally give it as their opinion that "the best way to render the immune carrier of virulent organisms innocuous is to secure that he lives not among susceptible children, but amongst children who have also been rendered immune by the safe and certain means provided by antitoxin."

MACLEOD YEARSLEY.

Abstracts

Ludwig's Angina and Mediastinal Abscess following Tonsillectomy: Operation; Recovery. CARL M. SAUTER, M.D., New York. (*Journ. Amer. Med. Assoc.*, 27th November 1926, Vol. xxvii, No. 22, p. 1831.)

The author reports a case of a man, aged 26, with a history of frequent attacks of tonsillitis. The tonsils were removed under local anæsthesia, and within four days the patient's temperature was 103° F. The throat was sore and bluish in colour, the sides of the neck were markedly swollen, and difficulty in breathing and great prostration were present. A few days later an incision extending down to the mediastinal cavity was made into both sides of the neck; foul pus escaped. After prolonged convalescence, the patient finally recovered.

ANGUS A. CAMPBELL.

Post-anginal Pyæmia. J. ZANGE, Graz. (*Zeitschrift für Hals-, Nasen-, und Ohrenheilkunde*, Band xvii., Heft 2, p. 141.)

Pyæmia of a mild or severe form may follow peritonsillitis, and also simple tonsillitis. The author compares two views, that of extension directly through the local veins to the jugular and that of secondary extension to the great vein through the lymphatic glands which accompany it; he pronounces himself in favour of the former. From the pterygoid plexus infection may reach the intracranial venous channels.

Treatment may be mild or vigorous according to the probable course of the disease in the individual case, as the observer's experience and acumen may indicate. In the severe cases the tonsil should be enucleated, neighbouring areas of suppuration evacuated from outside, the great veins being ligatured and resected only when already the seat of thrombophlebitis. The author holds that ligation of the non-thrombosed jugular vein may lead to reversal of direction of the blood stream and infection of the collateral veins. In milder cases extraction of the tonsil or slitting up of a peritonsillar abscess may be sufficient. A number of illustrative cases are described which support the author's views.

JAMES DUNDAS-GRANT.

Hypertrophy of the Tonsils in Lymphatic Leukæmia. F. STOKER. (*Lancet*, 1927, Vol. i., p. 1236.)

The writer remarks that lymphatic leukæmia though recognised as a cause of tonsillar hypertrophy, is not commonly given as such in the text-books. Its importance is obvious, as operation must lead to disappointment or even to disaster. He describes the case of a man, aged 55, in whom the diagnosis appeared to rest on absence of symptoms, symmetrical hypertrophy, painless enlargement of movable and elastic glands, and the blood count.

MACLEOD YEARSLEY.

The Larynx

THE LARYNX.

Papilloma of the Larynx treated by Tracheo-Laryngostomy. P. CALICETI.
(*Archiv. Italianni di Laringologia*, Anno xlvi., Fasc. 1-2, 1st
February 1927.)

The writer records the case of a child of three who had had a rough voice for a year and some dyspnoea for a fortnight. He was seen in a state of suffocation and was intubated. Later, tracheotomy was performed, and on examination of the larynx a mass of papilloma was seen springing from either side and completely filling the larynx. Treatment was attempted first by X-ray therapy, but after several months of this no improvement was observed.

At the age of four and a half the papillomata were removed by forceps through a Seifert's spatula. This was followed by a cicatricial band across the posterior part of the glottis and a recurrence. Six months later a tracheo-laryngostomy was performed after Ferreri's method, the thyroid and cricoid cartilages being divided along with the first ring of the trachea. Large masses of papillomata were removed from the whole of the lining of the larynx and from the subglottic space. The cavity was kept packed with vaseline gauze and kept dilated. Any sign of recurrence was at once treated with trichloroacetic acid. In four months the interior of the larynx was completely lined by smooth, healthy epithelium.

The aperture was gradually closed, and in less than six months after the laryngostomy the child breathed freely by ordinary methods and had a normal speaking voice.

F. C. ORMEROD.

Cartilaginous Growths in the Larynx, their Anatomy and Treatment.
ENGELHARDT, Ulm. (*Zeitschrift für Hals-, Nasen-, und Ohrenheil-*
kunde, Band xvi., Heft 1, p. 77.)

Following Alexander, the author distinguishes ecchondroses which are benign and non-recurrent, chondromata which under certain circumstances may become malignant, and mixed tumours which bear "the stamp of malignancy on their brow"; as regards the larynx, he banishes from the nomenclature enchondroma, "as cartilaginous growths arising from a non-cartilaginous matrix cannot occur in the larynx, as the matrix is always permanent cartilage (cricoid, thyroid or epiglottic)."

In chondromata there may be several kinds of cartilage side by side, but not in ecchondroses. There is also vascularity and a tendency to

Abstracts

regressive changes extending in the matrix. Ossification usually shows itself at some time or other in both (hence Röntgen examination may help in the diagnosis). The removal of a portion for microscopical examination is generally frustrated by the hardness of the growth.

The malignant tendency of the mixed tumours makes their diagnosis important as very radical treatment can alone be of any good, but the diagnosis may tax the powers of the most experienced histologist. Their main histological features are "alveolar arrangement of the cartilage cells with a greater or less number of vascular interalveolar septa." Naked-eye changes, such as "grape-cluster-like" tumour-masses, breaking down of the cartilage without ossification and perforation through the cricothyroid membrane make the diagnosis clear. It is found that the cartilaginous growths arising from the arytaenoid or thyroid are almost exclusively ecchondroses. Chondromata grow with equal frequency from the cricoid and thyroid, mixed tumours by preference from the cricoid. In the two benign forms, especially ecchondroses, the most conservative treatment is best (removal of projecting portion or, if thyrotomy is required, scraping away the growth and leaving the supporting cricoid cartilage). Mixed tumours "do not admit of compromise," the only favourable case recorded being Bond's (*Brit. Med. Journ.*, 1893). If the growth extends beyond the confines of the larynx total extirpation is called for. "The chief responsibility in regard to these tumours falls on the pathological anatomist; the clinician has in the doubtful cases to depend on him rather than on the clinical data." JAMES DUNDAS-GRANT.

THE TRACHEA

A New Tracheotomy Tube adapted for Speech. M. E. SETTELEN, Bâle.
(*Zeitschrift für Hals-, Nasen-, und Ohrenheilkunde*, Bd. xiv.,
Heft 4, p. 550.)

To obviate the necessity of applying the finger, at hazard, on the inspiratory opening, the writer has devised a valve attached to a lever, the distal arm of which lies on an india-rubber tambour. This last is connected by a tube which runs down the patient's arm to a flat oblong rubber "balloon" fixed to the wrist by means of a wrist-watch band. It can be compressed, so as to close the valve, by means of the other hand, or, if drawn down and attached by a hook to a finger-ring, by the fingers of the same hand. It was made by Dr Otto Settelen, a dental surgeon, for a patient in Professor Oppkofer's Clinic at Bâle.

JAMES DUNDAS-GRANT.

The Œsophagus

THE ŒSOPHAGUS.

Melano-Epithelioma of the Œsophagus. HERMAN J. MOERSCH and ALBERT C. BRODERS, M.D., Rochester, Minn. (*Journ. Amer. Med. Assoc.*, 23rd April 1927, Vol. lxxxviii., No. 37, p. 1319.)

Male, aged 59, appeared at the Mayo Clinic on 28th May 1926, complaining of dysphagia and regurgitation of one month's standing. His general condition was good, except for loss of weight of eight pounds. Röntgenological examination revealed a lesion at the lower third of the œsophagus. Investigation for syphilis was negative. Under local anæsthesia the œsophagoscope showed a "blackish" necrotic, ulcerated lesion at the lower third of the œsophagus. Microscopic examination confirmed the diagnosis of melano-epithelioma. Search was made to ascertain whether or not the lesion was primary in the œsophagus, but no other primary lesion was found. Five months after the examination the patient was alive, but failing rapidly. It is also stated that this is the only case in English literature. ANGUS A. CAMPBELL.

Cancer of the Œsophagus: End-Results of Treatment by Radium. J. GUISEZ. (*Bulletin d'Oto-Rhino-Laryngologie*, March 1927.)

J. Guisez cites 25 cases observed by him during the past fifteen years, dividing them into two groups:—

1. Cases 1-16 which survived for periods varying from three to fifteen years.
2. Cases 17-24 seen during the past one to two years, which are still under observation and responding successfully to treatment by local radium application.

Basing his experience on more than 450 cases, he decides that before commencing treatment it is necessary:—

1. that the diagnosis should be confirmed by endoscopy.
2. that the exact site of the cancer should be accurately measured from the superior dental arch.
3. that the length of the lesion should be estimated by means of X-rays and a bismuth meal, or by œsophagoscopy with a tube of small calibre.
4. that the stenosis should admit without difficulty a No. 20-22 bougie.
5. that the patient should not be too cachectic to support the treatment.
6. that no contra-indication should be present, such as spread of growth to neighbouring organs (larynx, stomach, liver, pleura, or lungs), or to glands or nerves (mediastinal glands or recurrent laryngeal nerve).

The author then describes the technique of radium applications, laying great stress upon the importance of fixing accurately and firmly in position the tubes of radium. L. GRAHAM BROWN.

Abstracts

MISCELLANEOUS.

On Sex-Incidence of some Diseases in the Upper Air and Food Passages.
Sir ST CLAIR THOMSON, M.D., F.R.C.P., F.R.C.S. (*Practitioner*,
February 1927.)

The physiological difference between the male and female voice is referred to. In the male there is more variation in the voice with the development and recession of the orchitic function than there is with the corresponding changes in sexual function in the female. The boy at puberty is more subject to spontaneous epistaxis than the girl at the same period.

The greater frequency of septal deformities in males is probably due to their great exposure in trauma. Ozæna is much more frequent in females and also more marked and offensive at the menstrual periods.

Tertiary syphilis of the pharynx is more common in men than in women.

Laryngeal affections of all kinds are found to be more common among males, and the writer thinks it probable that this is in some way associated with a reversion to earlier and more animal characteristics. On the other hand, as regards tuberculosis of the larynx, the writer's own conclusion, as against the formerly accepted view, is that any apparent difference in incidence has been due to the more protected life led by the majority of women, and that this difference tends to disappear with the encroachment of women into the sphere of male labour. Cancer of the pharynx is far more common in men than in women. In the œsophagus, cancer of the post-cricoid region is relatively more common in women, while in the lower reaches of the gullet the opposite holds good. In women, also, the time of onset is apt to be much earlier than in men.

The sex-incidence of functional aphonia has altered since the Great War. The emancipated woman more rarely suffers from functional loss of voice, while many men who have been through war service now present themselves with this complaint.

T. RITCHIE RODGER.

The Lacrymal Tracts, Röntgenologically displayed. STEDEFELD,
Berlin. (*Zeitschrift für Hals-, Nasen-, und Ohrenheilkunde*, Band
xvii., Heft 1, p. 7.)

This is effected by the injection of about 0.5 c.cm. of iodipin by means of the ordinary lacrymal syringe after dilatation of one of the canaliculi. It is advisable to take the photograph in two directions—fronto-occipital and bi-temporal or parieto-facial.

JAMES DUNDAS-GRANT.