Abstracts

Right Sphenoidal Sinusitis.—A. LOWNDES YATES.

Female, aged 38. Pain over right frontal and right occipital and mastoid region, six years ago. Pain ceased for two years after submucous resection of the septum and then recurred and was treated by repeated applications of cocaine. Injection of the sphenopalatine ganglion was refused by the patient. When first seen one year ago, 1 c.cm. of pus was washed out from the sphenoidal sinus and this was followed by relief of symptoms for one year. Three months ago the pain returned and was treated three weeks ago by displacement with relief of symptoms. All instrumental measures in the nose have caused reaction and the lysozyme factor in the discharge is low, the micro-organisms multiplying in the fluid. Operation has for this reason been deferred.

ABSTRACTS

EAR

Changes in the Auditory Apparatus in a Case of Bilateral Acoustic Tumour. DR. T. GERMAN (Recklinghausen). (*Monatsschrift für Ohrenheilkunde*, May, 1932.)

The frequency of the development of tumours in connection with the auditory nerves in contra-distinction to the other cranial nerves, and the bilateral situation in this disease, is of course well recognised. The author states that the cause of this predilection lies in the fact that in the neighbourhood of the cranial opening which transmits the nerves, embryonic fibrous tissue occurs between the nerve fibres, and especially, also, in the vestibular nerve at the point at which it divides into the superior and inferior branches.

The main reason for the publication of this case was the fact that although some thirty similar cases have already been published, according to the author, the number of those which had been subjected to histological investigation was extremely small.

Two components enter into the formation of these tumours: (1) Fibrous tissue, as is found elsewhere, and (2) a tissue which is a structure identical with the supporting tissue of the peripheral nerves.

The case on which the article is based, was that of a girl, aged 17, who first came under observation on December 19th, 1929. As the result of diseases during childhood, she was under-developed and so weak that she had to leave her school. Latterly, she had rapidly lost weight. She complained of evening headaches, with frequent vomiting after eating, dizziness and shivering whilst,

for the last month, the mother had noted facial paresis and deafness on the right side.

Examination.—Swellings from the size of a hazelnut to a child's fist were found in many regions (neck, back, buttocks, etc.), loss of power in the right hand and right foot. Gait with feet spread wide apart; tendency to fall to the right; tendon reflexes absent; both pupils irregular; the left larger than the right; paresis of the left external rectus muscle of the eye, coarse slow moving nystagmus on extreme deviation of the eyes to either side; slight exophthalmos left; slight paresis of lower branches of right facial; general enlargement of thyroid gland, held head towards the left.

Eyes.—Vision 5/50ths to 5/15ths; margin of optic discs indefinite; veins dilated and tortuous. Diagnosis—Recklinghausen's disease.

Ears.—Both tympanic membranes indrawn. *Hearing*—right, nil; left, whisper at 2 metres; tendency to fall to the right; Caloric reaction, right, nil; left, sluggish. Diagnosis—Right-sided tumour of cerebello-pontine angle.

Operation.—January 29th, 1930.—Large exposure of the occipital area by formation of a folding-door flap. Cerebellar dura and dura over the occipital lobe markedly tense. Free flow of fluid on splitting the dura. Some relief to general symptoms followed this preliminary operative measure.

February 17th.—Second operation after turning down the skin and bone flap made at the previous operation, the posterior horns of both lateral ventricles were punctured and the inferior longitudinal sinus ligatured, when a portion, the size of a nut, was able to be removed from the tumour lying on the posterior surface of the petrous bone.

The patient never recovered from the operation and died three days later.

At the *post mortem* examination remnants of a tumour were found in the right cerebello-pontine angle compressing the pons to such an extent that it was quite distorted, and occupying the internal auditory meatus, whilst another, though smaller, tumour also invaded the meatus on the opposite side, from which in both cases, the corresponding nerves were inseparable. Other similar swellings were distributed throughout the body, the largest of which (the size of a child's fist) lay in the costo-vertebral angle opposite the sixth and seventh ribs on the right side.

The temporal bones were removed and prepared for further examination. The histological account of these, which is given in detail, showed invasion of the middle ear, the internal meatus and the inner ear, with considerable defects in termination of the auditory nerve, corresponding ganglion and the organ of Corti on each side, whilst the ganglion spirale remained almost unaffected.

The modiolus, however, " showed the picture of osteoporosis " on the right side. This latter finding is of particularly great interest in connection with the cases of acoustic tumour lately reported by Albert Gray and described in the *Journal of Laryngology and Otology* (August, 1933).

Out of three cases of acusticus tumour, Gray found otosclerotic (osteoporosis) changes in the bone present in all, and attributed their occurrence to interference with the reflex arc, which governs the nutrition of the tissues of the organ of hearing. The view that otosclerosis is itself a trophic disease of the organ of hearing derives considerable support, therefore, from the facts revealed by the histological examination of these cases of acusticus tumour.

All these histological findings are described at length in connection with the previous clinical symptoms. The author also deals with the question of operation in this case, which he considers was justified by the hope that such a procedure would give temporary benefit, although unfortunately this was not the case.

ALEX. R. TWEEDIE.

Exostoses and Hyperostoses of the external meatus. E. RUTTIN. (*Acta Oto-laryngologica*, xviii., fasc. 4.)

Forty-four cases of bony growth of the auditory meatus are described in considerable detail, and many illustrations are given of both the clinical and the histological appearances.

The male sex (37 cases) is affected much more frequently than the female (7 cases). The age of the greatest number of the patients when they come under observation falls within the third to the fifth decennium. As, however, the growth is slow and causes no symptoms for a long time, it probably begins most often towards the end of the period of general body growth. It is very rarely seen in early life and none of the author's cases came within the first decennium.

The fact that in about half the cases the condition is bilateral suggests that we may have to do with an hereditary predisposition, which becomes manifest soon after the cessation of body growth, as in otosclerosis. Instances occur of the disease in several members of the same family.

Three characteristic varieties of benign bony new growth of the meatus may be distinguished:

(1) Multiple exostoses of the deep meatus.

(2) Diffuse hyperostosis of the inferior (occasionally of the anterior inferior) wall of the meatus arising from the outermost portion of the bony meatus.

(3) Solitary exostoses of the posterior superior (occasionally of the anterior superior) wall.

The multiple exostoses and diffuse hyperostosis are often present together. A few cases, especially those in which the growths are very large, cannot be ascribed definitely to one or other of these types.

There is nothing to suggest that the growths are caused by or especially associated with any other disease. They appear to be due to some inborn predisposition or constitutional defect in the organ of hearing, as each of the varieties of bony growth is frequently accompanied by a lesion of the cochlea, this being found in no less than twenty-three of the author's cases, in eighteen of them on both sides. The vestibular portion of the labyrinth is much less often affected (seven cases only).

The histological structure of the solitary exostoses is remarkable for the large proportion of fibrous tissue in which the tracts of spongy bone are embedded, the whole being surrounded by a thin shell of compact bone under the periosteum.

In the multiple exostoses, also, there are medullary spaces filled with fibrous tissue, but the proportion of bone is much greater, and in the hyperostoses the bone is relatively dense.

The solitary exostosis is generally easy to remove. The multiple exostoses, on the other hand, owing to their proximity to the tympanic membrane, their broad base of attachment, and their dense structure are both difficult and dangerous to remove ; and, as they grow very slowly and seldom cause complete blocking, operation is rarely required. When, however, two or more exostoses on opposite walls of the meatus come in contact with one another, and pressure necrosis and, later, coalescence causes complete closure of the meatus, operation may be necessary, especially in the presence of an acute or chronic otitis media. In such cases, after a post-aural incision, the pinna must be turned forward, the cartilaginous meatus separated, and the bony posterior meatal wall removed, as in the radical or the conservative radical mastoid operation. No attempt should be made to deal with this variety of exostosis through the meatus.

THOMAS GUTHRIE.

Considerations on the Structure of the Mastoid Apophysis during Affections of the Middle Ear. DRS. BRATESCO, RACOVEANO, GIUREA and DONESCO. (*Les Annales d'Oto-Laryngologie*, December, 1932.)

The writers give statistical results of their findings in two hundred skiagrams of the mastoid bone together with the results of their clinical examination of the cases submitted to radiography that had various forms of inflammatory affections of the middle ear, acute or chronic. They conclude that in almost all the inflammatory affections of the middle ear the mastoid apophysis

is subjected to deep and early inflammatory changes, although these may not be revealed by changes. This fact is explained by the morphological analogy existing between the middle ear and the mastoid cells and by the anatomical disposition of the apophysis. However, from the point of view of prognosis and therapy, radiography remains only an auxiliary method of investigation not in itself capable of giving indications for the necessary line of treatment, but only when considered in conjunction with the clinical symptoms.

L. GRAHAM BROWN.

Vertigo. DRS. HAUTANT, AUBRY, CAUSSÉ and RAMADIER. (*Les Annales d'Oto-Laryngologie*, January, 1933.)

The first four chapters of this excellent monograph are written by Hautant himself. He begins with a definition of vertigo, in which he points out the importance of dissociating the sensation of vertigo, which is a cerebral manifestation, from disequilibration, which is a reflex manifestation independent of consciousness and not necessarily in proportion to the former. For purposes of instruction he divides the various types of vertigo into the following, viz. the neuralgic, the neuritic, the cerebral, the endocranial (of medullary origin), and the commotional (traumatic concussions of the skull). He finds it useful to divide the neuralgic types of vertigo into those occurring with an apparently healthy labyrinth, and those associated with a labyrinth already altered. The former include vertigo due to angiospasm (e.g. during the menopause), and that due to some form of intoxication, e.g. alcohol, carbon monoxide, tobacco, and absorption of endogenous toxins from the gastro-intestinal tract, whilst the latter include those due to arteriosclerosis of the internal ear.

In the neuritic type there is a definite lesion of the labyrinth or its nerve supply, such as occurs in syphilis and consecutive to suppurations of the middle ear. When the labyrinth is completely destroyed vertigo is more often absent.

Hautant devotes a chapter to the mental condition of vertiginous individuals. They may suffer much from anxiety and fear, the memory of former crises dominating their minds. In such cases psycho-therapy forms the basis of treatment.

The chapter on associated vertigo of central origin is by Aubry. He regards vertigo of this nature as due to a lesion of the vestibular centres or of their paths of association. It is unaccompanied by deafness or tinnitus and is not systematised, that is to say, the patient suffers more from a vague sensation of disequilibrium rather than feels that surrounding objects are moving in a given direction about him. It is necessary to distinguish between the lesions situated in the vestibular zone, in the cerebral trunk, and in

the neighbourhood (cerebellum and cerebello-pontine angle but outside the cerebral trunk). He describes how these lesions can be recognised.

The chapter on cerebral commotion is by Caussé. He describes the method of examination in these cases and discusses the symptoms in such clinical varieties as fracture of the petrous bone, cerebral commotion, labyrinthine commotion, labyrinthine neurosis, and simulation.

Ramadier deals with the question of treatment in all these various types of vertigo. It may be symptomatic or sedative, ætiological, or treatment by removal of the cause, and surgical, by destruction of vestibular sensibility. Full details are given of the various forms of medical and surgical treatment, the latter comprising such operations as decompression of the cerebello-pontine angle, lumbar puncture, decompression of the internal ear (*viâ* external semi-circular canal), destruction of the internal ear, or section of the auditory nerve.

L. Graham Brown.

On the Origin and Development of Gradenigo's Syndrome. D. G. W. van Voorthuysen. (*Acta Oto-laryngologica,* xviii., fasc. 3.)

Gradenigo's syndrome is a special manifestation of otogenous osteomyelitis of the petrous pyramid. The conception that it might be due to an influenzal neuritis is not borne out by the facts. The severe homolateral headaches are an outstanding symptom of this inflammation of the petrous. The generally accepted theory that it is to be attributed to Gasserian pain caused by direct inflammatory invasion of the trunk of the trigeminus or of its ganglion cannot be supported.

The headache is due, moreover, to a stimulation of the nerve-endings of intracranial branches of the trigeminus, especially of the recurrent ophthalmic nerve of Arnold, which innervates the pyramid and the subjacent dura mater.

The distant pains are radiating pains and it is in this way, for example, that the orbital pains are caused by an irradiation in the domain of the ophthalmic nerve. The paralysis of the abductor muscle is quite a rare consequence of petrositis, which in this case has extended to the extreme point of the apex of the pyramid. It can be produced as well by the pressure of œdematous infiltration as by the prolongation of focal inflammation to the nerve itself.

Otogenous petrositis resembles acute mastoiditis in many ways. The generally benign character of Gradenigo's syndrome is due to the special structure of the petrous bone. The suppuration, the osseous destruction and the extra-apical abscess formation are not necessarily part of the process and are certainly not the cause of the

syndrome. More often they represent an ulterior development of this petrositis and engender consequently endocranial complications.

In inflammations of the petrous bone, and in particular in the syndrome of Gradenigo, one should be on the lookout for a new symptom—a tender area over the under surface of the apex of the pyramid, which is to be discovered by the finger or a sound in the epipharynx behind the Eustachian cushion. Under urgent conditions one should try X-ray treatment of the petrous bone before deciding to carry out perilabyrinthine opening up of the mastoid and petrous bone.

[Translation of author's abstract.]

H. V. FORSTER.

Experimental Investigation of the Physiology of the Ear. WALTER HUGHSON and S. J. CROWE. (*Acta Oto-laryngologica*, xviii., fasc. 3.)

Conclusions:

1. Using the Wever and Bray phenomenon and with an accurate method of measurement of the intensity of tones transmitted through the cat's ear, circumcision of the tympanic membrane has practically no effect upon the intensity of tones received through the amplifying apparatus. This confirms in every particular the observation which had been reported previously.

2. Fixation of the tensor tympani muscle produces a loss of conduction of low tones. It has also been found that the muscle will contract reflexly following stimulation of the pinna, the external auditory canal or the facial nerve.

3. The effect of immobilisation of the secondary tympanic membrane with a pledget of cotton (previously reported) has been repeatedly confirmed. In addition tissue grafts of periosteum placed in the round window niche with sterile precautions grow in that position and, when the animals are tested at intervals of from two days to seven weeks, transmission upon the operated side is increased from ten to fifty decibels for the different oscillator tones. No explanation of this phenomenon other than immobilisation of the secondary tympanic membrane can reasonably be considered at the present time.

4. An accurate and reliable method has been developed for measuring intralabyrinthine pressures and for demonstrating the relationship between cerebro-spinal fluid and intralabyrinthine pressures. Using this method it has been shown experimentally for the first time that marked decrease in intralabyrinthine pressure causes a reduction in the intensity of all tones transmitted and usually a complete loss of high tones. Increased pressure has little, if any, effect upon conduction. Possibly, with extreme increases, a slight improvement may result. There is a definite lag in the change

produced upon intralabyrinthine pressure, the extremes here not being reached until some time after the limit of change of the cerebro-spinal fluid pressure has occurred.

5. A method has been developed whereby bone conduction may be studied experimentally and the intensity of this type of tone transmission can either be improved or made less intense by a variety of procedures.

[Author's conclusions.]

H. V. FORSTER.

Some Remarks on the Treatment of Apicitis (Petrositis) in general, and on Frenckner's Operation in particular. A. GALTUNG (Oslo). (*Acta Oto-laryngologica*, xviii., fasc. 4.)

Four cases of Gradenigo's syndrome are described in children suffering from scarlet fever otitis media. All the patients recovered.

In one of them the syndrome appeared before, in the other three after, antrotomy. Headache was not definitely complained of in one case. In Case IV when the field of the mastoid operation was being opened up for the second time it was decided to perform the operation recommended in cases of petrositis by Frenckner of Stockholm and described in the *Acta Oto-laryngologica*, Vol. XVII, Part I, p. 97.

The result was so encouraging that a definite improvement in the movements of the eye on the affected side was noticed by the boy's mother as early as five hours later.

H. V. FORSTER.

Hearing Acuity and Middle-Ear Infections in Constitutional Types. ANTONIO CIOCCO (Baltimore). (*Acta Oto-laryngologica*, xviii., fasc. 4.)

The writer had access to the records of the Division of Human Genetics of the Institute of Biological Research at Baltimore. The persons constitutionally studied were either out-patients or in-patients of the Johns Hopkins Hospital and it so happened that 172 of these patients had also been examined in the Otological Research Laboratory in the course of its routine work.

The author summarises the results of his investigation as follows :—

" In a group of 172 individuals for whom both constitutional and otological data are available, it has been found that the Asthenics in general have a greater degree of loss for high tones, with respect to age and sex, than the Intermediate or Pyknics, and (2) that individuals with square or round faces (five cornered or shield types) have the greater incidence of middle-ear infections."

H. V. FORSTER.

Abstracts

NOSE AND ACCESSORY SINUSES

Ethmoid-Orbital Epitheliomata. Treatment by Surgery and Radium and After Results. A. HAUTANT, O. MONOD and A. KLOTZ. (*Les Annales d'Oto-laryngologie*, April, 1933.)

In some anatomical situations the malignant growth is accessible to surgical excision whereas in others, sarcoma of the tonsil for instance, treatment by radiation alone is indicated. In the type of case under discussion, the best results are obtained by a combination of both forms of treatment. In their analysis of the results of treatment, no claim to a cure is made unless there has been freedom from recurrence after four years. In their series of twenty-one cases treated by these means a cure was obtained in 38 per cent. The histology of these growths is first discussed. The usual neoplastic formation is epithelioma. The usual site of origin of these tumours is the posterior ethmoid, from which the growth penetrates into the orbit. The antrum is invaded at a later date. Unilateral nasal obstruction with serous or muco-purulent discharge, often discoloured with blood, are early symptoms. The termination of the disease is nearly always by the spread of the growth to the cribriform plate, the destruction of which leads to meningitis. Stress is laid on the accompanying headache, which takes the form of a heaviness referred to the frontal sinus area. Clinical examination in the early stages is often negative. Nothing abnormal can be noted by anterior rhinoscopy, but posterior rhinoscopy may show some bleeding granulations, and the tubal orifice may be masked by the new formation. Radiography may reveal a shadow in the region of the posterior ethmoid of the affected side. The difficulty of distinguishing by radiography between infection and new growth is emphasised. Glandular and other forms of metastases are rare.

The surgical treatment of this condition is discussed next. The authors prefer the extirpation of the cancerous area by approaching it through a curved incision starting over the glabella and extending round the lower margin of the orbit. The technique of this operation is described with illustrations. Details of the subsequent irradiation of the diseased area are given. Radon seeds are preferred to radium. They are inserted at the end of the operation, and removed from the nasal fossa about five days later. The article concludes with a useful analysis of the cases treated in the manner described.

M. VLASTO.

A contribution to the study of the Anatomico-pathology and Treatment of Ozæna. DR. GUNS and DR. PICARD. (*Annales d'Oto-laryngologie*, March, 1933.)

We are first given a brief histological survey of the normal lining of the nasal fossae. In cases of ozæna the usual pathological

changes to be noted are as follows :—(1) Metaplasia of the cylindrical ciliated epithelial cells into the stratified pavement type, (2) fibrosis of the subjacent chorion with atrophy of the mucous glands and infiltration by small round cells. (3) atrophy of the turbinate periosteum.

Next we are given the findings in thirteen cases personally investigated by the authors. In each case the biopsy was carried out in the region of the inferior turbinate and before the institution of treatment. Their results are noted, with photomicrographic records. The authors review the effects on their cases of most of the classical forms of treatment. Some of these yield brilliant initial results, but relapses invariably occur. We are then introduced to the preparation " acetylcholine " which is painted on the surface of the nasal fossae and which has yielded cures in 65 per cent. of cases. Acetylcholine has a local dilatory action on the glands and blood vessels of the mucous membrane. This treatment is best combined with the internal administration of pilocarpine. It is given in pill form (gr. 1/20) twice a day. This combined form of treatment succeeded in curing another 25 per cent. of cases. In the remaining 10 per cent. of cases which did not respond to this treatment, the authors were successful by surgical measures.

M. VLASTO.

Nasal Sinusitis in relation to General Infection. CLIVE M. EADIE. (*The Medical Journal of Australia*, May 27th, 1933, p. 637.)

The writer bases his conclusions on *post mortem* findings in 120 cases and a clinical study of over 100 cases. *Post mortem* examination revealed the presence of nasal sinusitis in eleven fatal cases of lobar pneumonia (i.e. in every case examined), and in sixteen, out of a total of twenty-two cases, of broncho-pneumonia. Sinusitis was less frequent in pulmonary tuberculosis. Dealing with his clinical material, Eadie mentions the association of sinusitis with chronic arthritis, with influenza, with skin affections, and with arteriosclerosis, and he pleads for a closer co-operation between the general physician and the laryngologist.

DOUGLAS GUTHRIE.

A Case of Chronic Nasal Glanders. I. SOBOL. (*Acta Oto-laryngologica*, xviii., fasc. 4.)

The writer describes glanders as " one of the severest of infectious diseases and the pages devoted to it are among the most depressing in medical literature ".

In the acute type we have a picture of grave septicæmia causing death in a few days. The chronic type progresses steadily as a rule to a fatal end, the history of the case described extended over a period of about nine months. The disease may apparently exist for years without recognition.

Abstracts

Glanders is present in all parts of the world except Australia, and is found most commonly in the Ukraine. The year 1882 was a historical one in the development of the theory of the disease when the exciting cause—the bacillus mallei, was discovered by observers in Germany, France and Russia. The writer's case was that of a man aged 37 who four months previously had been struck on the nose by the muzzle of a horse. The ala nasi became infected. Nasal syphilis was at one time suspected and later glanders, but the condition was not proved to be glanders until after death.

In this article the author gives a scientific survey of the history of the theory of glanders, considers the causes of the progress of the disease and discusses a number of suggested remedies. A picture of the author's case is shown and the temperature chart is reproduced. A bibliography is added.

H. V. FORSTER.

LARYNX

The Treatment of Laryngeal Tuberculosis. E. WESSELY. (*Wiener Klin. Wochenschrift*, Nr. 43, Jahr. 45.)

The indications for the conventional forms of treatment are detailed.

Light treatment, either with natural or artificial sunlight, is especially advocated owing to the relative paucity of counter-indications and the excellence of results. The author employs an apparatus of his own design.

Under the influence of the short light-waves the specifically affected tissues are repaired, whilst fibrosis of the surrounding healthy tissue is induced. Light has also a strikingly analgesic effect.

The Viennese School is decidedly adverse to trying tuberculin injections in these cases.

The writer refers to the urgent advisability of repeated laryngeal examinations in cases of pulmonary tuberculosis so that the most appropriate treatment can be applied at the earliest opportunity.

J. B. HORGAN.

TONSIL AND PHARYNX

Radiation Treatment of Cancer of the Mouth and Pharynx. STANFORD CADE. (*Lancet*, 1933, ii., 4.)

The writer describes his results in 337 patients, of whom 113 (33·5 per cent.) are alive for periods varying from seven to one year. Of these, 225 were tongue cases. Asking the question: What is the case for radiation in cancer of the mouth and pharynx? he answers it thus: (1) Total disappearance of neoplasms including

glandular metastasis can be achieved by means of radiation. (2) The disappearance of the growth both primary and secondary may be permanent or temporary, but this is quite impossible to predict clinically. (3) In the few years during which radiation has been used it has reached equality of status with surgical excision as regards operable cases. (4) In inoperable cases it is the only available method of treatment. (5) Radiation is a purely local remedy, and has no influence whatsoever on the subsequent development or dissemination of the disease. (6) In surgically hopeless cases palliation given by radium and X-rays is certainly worth while from the patient's point of view. (7) The most powerful and most promising weapon we possess to-day is the "mass radiation unit". (8) What we have to learn about radiation is infinitely greater than the little we know now.

MACLEOD YEARSLEY.

The Performance of Tonsillectomy on Diabetic Patients. RUDOLF SINGER. (*Wiener Klin. Wochenschrift*, Nr. 13, Jahr. 46.)

If sufficient care be taken the complete surgical removal of the tonsils (this alone is effective) can be carried out without risk even in bad cases of diabetes. The operation should be undertaken in all cases of diabetes that suffer from chronic or recurrent attacks of tonsillitis owing to the pernicious effect of the latter upon the metabolic disease. Full instruction is given as to the dietetic and intravenous medicinal preparation of the patient, and as to the time and frequency of the preliminary examinations of the blood and urine. It is essential that the patient be put in a hospital where these examinations can be quickly and expertly made and the results correlated.

The operation is carried out under general ether narcosis. The post operative course of the patient and his wounds should show no material difference to that observed in the case of non-diabetic patients.

(The case histories of six diabetic patients are given.)

It is important for the patient to continue to take the full calculated amount of necessary nutriment after operation. The superficial wound pain is countered by the insufflation of orthoform and the painful contraction of the infiltrated pharyngeal muscles by the administration of phenacetin and pyramidon powders. Thin unsalted porridge, stewed fruit, and a pabulum of groats or rice are suggested as suitable articles of diet.

The author emphasises the facility with which tonsillar sepsis may escape unnoticed unless it be sought for by exerting sufficient pressure on the anterior faucial arch to evert the tonsil.

J. B. HORGAN.

Abstracts

The Tonsils and their Conservative Treatment with Röder's Suction Methods. MAX JÄGERMANN. (*Münch. Med. Wochenschrift*, Nr. 44, Jahr. 79.)

Having regard to the fact that the function of the tonsils is not yet established, that in consequence there is an appreciable danger in removing them, that the success expected from the operation sometimes fails to materialise and that their removal sometimes increases the liability of the patient to "colds", an effort should first be made to re-establish the health of the tonsils by conservative means.

Röder's methods of tonsil suction, on account of their simplicity and the success which has attended their employment deserve prior consideration. This method not only cures the symptoms of tonsillitis but re-establishes the health of the tonsils. If more attention and interest is devoted to the method in future, progress in the therapy of the tonsils will have been attained. It is applicable to all ages. The treatments are regulated according to the type of disease, the age of the patient and the condition of the tonsils. The more recent the trouble the quicker the success. In general the treatment is carried out two or three times weekly, in acute cases more often, for some weeks. The intervals may be progressively increased up to from four to six weeks. The treatment can be extended over months or years.

The apparatus used consists of the familiar bowl-shaped suction-glass with prolongation as a glass tube to which is fitted a rubber suction-ball (which is illustrated).

At the Hydrotherapeutic Institution in Berlin, at which Jägermann works, the method is extensively used. It is used in localised disease of the tonsils, both acute and chronic, as also for the symptoms, that is for the various rheumatic and allied diseases. It is also employed in acute infectious diseases such as scarlet fever, measles and diphtheria as an adjunct to the conventional hydro-therapeutic measures.

J. B. HORGAN.

Tonsillectomy in Acute Tonsillitis and in cases of Post-Anginal Tonsillar Sepsis. E. WIRTH. (*Münch. Med. Wochenschrift*, Nr. 42, Jahr. 79.)

The dangers and difficulties of tonsillectomy in cases of acute tonsillitis have been over-estimated. Tonsillectomy can be carried out in such cases under local anæsthesia without special risk. Tonsillectomy in conditions of acute inflammation is, in general, to be avoided and only is indicated if some complication co-exists. The complications which especially indicate this line of action are the presence of a deep-lying peritonsillar abscess and the onset of post-anginal septicæmia. The success of a tonsillectomy is often

astonishing in such cases. Threatening symptoms of general sepsis, and even rigors, often disappear at once, without any external interference. Therefore in all cases of post-anginal sepsis that are not too far advanced the far simpler and less extensive procedure of tonsillectomy should be undertaken. However, if needs be the external operation should not be too long delayed. The decision as to the kind and sequence of any operations undertaken (whether tonsillectomy, exposure of the carotid sheath or ligature of the internal jugular vein) must be determined by the actual conditions prevailing in each case. According to Wirth's experience two-thirds of the cases of post-anginal sepsis can be saved.

Two temperature diagrams of detailed cases are shown.

J. B. HORGAN.

On the importance of the Leucocytic Blood-picture as an indication for Tonsillectomy in Diseases due to Focal Infection. M. DIAMANT. (*Acta Oto-laryngologica*, xviii., fasc. 4.)

In a paper, which appeared in Vol. xvi., fasc. 2 and 3 of the "Acta", Gording and Björn-Hansen reported their observations on symptoms of focal infection of dental and tonsillar origin, and on the changes in the leucocytic blood-picture before and after removal of the foci of infection.

Their results showed that in such cases there was found a displacement to the left (linksverschiebung) in the Arneth-Schilling leucocyte blood-picture, that is to say, an abnormally large percentage of immature cells, and that this fact could be used as a means of detecting the presence of a chronic focal infection.

The author of the present paper discusses the views of Gording and Björn-Hansen and gives the results of his own investigations of the blood condition of 100 cases of chronic tonsillitis uncomplicated by any form of acute infection.

He concludes as follows :—

(1) That a displacement to the left in the leucocyte blood-picture, which, when present, is always a sign of an existing infection, is not found in cases of chronic tonsillitis with focal infection, if these are examined during a latent period.

(2) That the displacement to the left is not a phenomenon which accompanies the condition of focal infection, when this is due to a focus of chronic infection in the tonsil.

(3) That the presence of displacement to the left is not only no indication for immediate tonsillectomy, but actually points to a postponement of the operation, and a search for the active infection which is causing the abnormal blood-picture.

THOMAS GUTHRIE.

Abstracts

On the Effects of Tonsillectomy in Acute Articular Rheumatism. J. DUERTO (Barcelona). (*Les Annales d'Oto-laryngologie*, March, 1933.)

In the fifty cases of acute articular rheumatism on which this article is based, the focal infection was found in the tonsils in 80 per cent. These cases were all operated upon, and a full pathological investigation was carried out. The following conclusions were reached by the author:

(1) Chronic infective tonsillitis is the most frequent cause of acute rheumatism. (2) Although the present state of our knowledge does not permit us definitely to confirm the alleged tuberculous nature of rheumatism, yet there is sufficient evidence that this is the case to justify further researches in this direction. (3) Tonsillectomy has a very definite and immediate beneficial effect in acute articular rheumatism although this statement does not apply to acute rheumatic endocarditis. Even in the latter condition, however, an improvement is to be observed. (4) The tonsillectomy must be very complete. No particle of lymphoid tissue should be left *in situ* otherwise the result will be a failure. As the adenoid tissue is often infected with the tonsillar tissue, the naso-pharynx should always be explored digitally and the adenoid tissue, if present, should be removed.

M. VLASTO.

ŒSOPHAGUS AND ENDOSCOPY

The Surgical Management of very small and early Pulsion Œsophageal Diverticula. FRANK H. LAHEY. (*Surg., Gyn. and Obst.*, lvi., No. 2, 1933.)

Owing to the technical difficulty of the operation very small œsophageal diverticula have been left untouched until they have enlarged to such a size that the dome of the pouch will reach the skin. This has entailed unnecessary discomfort to the patient, and the author advocates operating on these cases as soon as they are diagnosed, the two stage operation being preferred.

The approach to the diverticulum is the same as for the larger type, and is performed under regional anæsthesia. The sac is identified (by asking the patient to swallow), picked up and dissected free of surrounding structures. The dome of the sac is then anchored to the sternohyoid muscle by two black silk stitches, so that it is at a higher level than the opening of the sac into the lumen of the œsophagus. The wound is then closed with a drain in position.

At the end of ten days the wound is reopened, the sac being identified by the black stitches, and an incision is made about the neck down to, but not through, the mucosa; the latter is ligated,

the sac cut away and the stump cauterised; finally the wound is closed after a cigarette drain has been carried down to the stump.

Following the operation the œsophagus should be dilated by a bougie passed upon a string guide every two months for a year at least.

SIDNEY BERNSTEIN.

The Operation for Perforations of the Cervical Œsophagus. HERMAN E. PEARSE, Jr. (*Surg., Gyn. and Obst.*, lvi., No. 2, 1933.)

Perforations of the cervical œsophagus subject the patient to the risk of mediastinitis, owing to the free communication existing between the cervical region and the mediastinum.

Although a localised abscess beside the œsophagus can be drained through the œsophagoscope, the author advocates the external operation, as by this method the extravasated material can be drained and at the same time a transverse barrier can be created which shuts off the neck from the chest.

A modification of the original operation described by Marschik is performed by the author. The disadvantage of the original operation is that the barrier created is not always below the lowest point of infection, and consequently it sometimes fails to prevent the occurrence of a mediastinitis.

In the author's operation an incision is made along the anterior border of the sternomastoid, as low in the neck as possible; the dissection is carried deeply between the carotid sheath and the thyroid gland to expose the œsophagus. At times it may be necessary to divide the inferior thyroid artery to obtain a suitable exposure. The finger is then inserted behind the œsophagus, which is separated from the prevertebral fascia. A gauze or rubber drain is then inserted behind the œsophagus, extending beyond it to the opposite side, and is brought out between the trachea and the thyroid gland medially, and the carotid sheath and sternomastoid muscle laterally. In cases of bilateral infection this procedure is carried out on both sides.

Post-operative feeding is by means of a catheter, or, when the perforation is large, gastrostomy.

SIDNEY BERNSTEIN.

Radiographic Observations on the Act of Swallowing. LAZA POPOVIC (Zagreb). (*Acta Oto-laryngologica*, xviii., fasc. 3.)

When after bucco-pharyngeal deglutition—in persons otherwise quite well—we find remains in the glosso-epiglottic fossae and the pyriform sinuses, there always exists a hypoæsthesia or an anæsthesia of these regions.

Abstracts

In the present work it is shown how, after artificial anæsthesia of these parts, there is also to be observed a stagnation of particles coming from the bolus of food which has just been swallowed. Once this artificial anæsthesia has passed away, the pharynx becomes clear immediately after swallowing. From these observations the author points out the complicated and insufficiently explained mechanism which accompanies deglutition in the upper segment of the food passages.

[Translation of author's abstract.]

H. V. FORSTER.

Tubercular Tracheo-Œsophageal Fistula, with a Report of the Case. R. M. GLYNN (Adelaide). (*The Medical Journal of Australia*, April 29th, 1933, 526.)

A man (age not stated) was seized with pain in the substernal region while he was drinking. This continued intermittently and after barium showed some of the barium escaping from the œsophagus into the left bronchus, and the fistula was also demonstrated by endoscopy. Some improvement was noted after the patient had been kept under observation and the writer suggests that the fistulous communication between the trachea and œsophagus may pass by way of a tuberculous lymphatic gland, which may heal and thus close the opening. Reviewing the literature, Glynn notes that Moersch of the Mayo Clinic recorded seventeen non-congenital cases of tracheo-œsophageal fistula. Albernaz collected 639 cases, most of them congenital or carcinomatous. Tuberculosis is described as a cause by Heddaeus and Pehu, and Rivière describes how a tuberculous retro-tracheal gland may become attached to the œsophagus, causing a traction diverticulum, and may then ulcerate into the trachea, thus completing the fistulous communication.

DOUGLAS GUTHRIE.

The Differential Diagnosis and Therapy of Disorders of Deglutition. MARTHA BRUNNER. (*Wiener Klin. Wochenschrift*, Nr. 12, Jahr. 46.)

Examination by X-ray, and more especially by screen examination, is of prime importance in making a differential diagnosis of disorders of deglutition. In order to confirm the diagnosis of malignant stricture an œsophagoscopic examination is indicated. The author has found indirect palpation, if necessary by means of a special bougie, to be a generally useful and reliable aid to diagnosis. The special or bridle bougie, of which a diagram is given, is of the gum elastic variety with a metal cap at its lower end, to the lower convex extremity of which a woollen thread is attached.

This thread passes through a small conduction ring some distance up the shaft of the instrument. By exerting a pull on this thread the introducer of the instrument is able to alter the direction of the forward progress of the bougie when held up whilst *in situ*. It further allows the introducer to detect the fact that the bougie has become bent back upon itself.

Stress is laid upon the importance of ascertaining the history of previous injury or disease in the region of the throat.

Cases with dilation of the gullet without spasm are considered to offer a relatively bad prognosis, though such cases can be favourably influenced by endo-faradisation. This form of therapy gives still better results in cases of œsophageal atony without dilation. Very good results were obtained by means of the diathermic bougie in cases of so-called " cardio-spasm ". It is indeed in such cases, even when so severe as to endanger life, that the prognosis with this treatment is best. It is often possible to effect a complete disappearance of the symptoms by a single treatment in a very emaciated patient with spastic obstruction. The principle underlying the treatment with the diagnostic diathermic bougie aims at obtaining dilatation of the contracted muscle fibres after diathermic relaxation has been achieved.

J. B. HORGAN.

MISCELLANEOUS

Lateral Aberrant Thyroid Glands. STANLEY E. LAWTON. (*Surg., Gyn. and Obst.*, lvi., No. 3, 1933.)

Tumours of the neck arising from lateral aberrant thyroid glands are extremely rare, but when they do occur they are difficult to diagnose and tend to become malignant.

The origin of these tumours is still in dispute, but the evidence available tends to show that they are derived from the fifth branchial pouch. Many produce no symptoms at all. A few produce pressure on the trachea and vessels sufficient to give rise to symptoms. The diagnosis is rarely made, the tumours tend to increase in size at puberty, to vary in size during menstruation, and to become cystic. They are usually bilateral. They may consist of either a single or a chain of glands connected by strands of thyroid tissue, varying in size from a few centimetres up to ten centimetres or more in diameter, and often resemble normal thyroid tissue. There is a marked tendency for them to become malignant.

Three cases are described as having occurred during the course of ten years at the Presbyterian Hospital, Chicago.

Treatment consists in the removal of all doubtful masses in the neck followed by a course of X-ray treatment.

SIDNEY BERNSTEIN.

Abstracts

Surgical Management of Lip Malignancies. FERRIS SMITH. (*Surg., Gyn. and Obst.*, lvi., No. 4, 1933.)

Early small lesions about the lip are effectively managed either surgically or by some other destructive agent. The amount of tissue removed is determined by the size and character of the lesion, the lines of the excision being slightly curved so that approximation results in a small elevation of the lip border; this prevents the formation of a notch in the lip border as the result of linear scar contraction.

The management of the larger lesions of the lip consists in the wide excision of the growth and surrounding lip with block dissection of the neck when required, reconstruction of the lip, and the repair of any cosmetic defects.

Following the excision of the growth, the gap in the mucosa is replaced by a flap turned over from the skin adjoining the angle of the mouth, while a second skin flap, cut at right angles to the first, is utilised to cover the lip and the defect left by the reflection of the lining flap. The red border of the lip is reconstructed from the mucosa bordering the lip remnant which is turned down before the skin flaps are cut, and which is finally sutured in position. Later, any cosmetic defects are remedied, and at the end of two months, in the case of male patients, the skin lining can be replaced in stages with normal mucous membrane from the cheeks when the annoyance due to the growth of hair justifies this.

It is claimed for the method outlined that this plan of management permits the boldest attack on the local lesion and at the same time provides a method of repair which is highly satisfactory from both functional and cosmetic points of view.

SIDNEY BERNSTEIN.

The Advantages of an Extreme Trendelenburg Position in Operations of the Upper Respiratory Tract. JOSEPH A. PETTIT. (*Surg., Gyn. and Obst.*, lvi., No. 4, 1933.)

The author advocates the use of the extreme Trendelenburg position combined with the use of an efficient suction apparatus in all surgical procedures about the upper respiratory tract carried out under general anæsthesia. He believes that this eliminates the aspiration of blood, secretions or infective material, and thus reduces the possibility of the occurrence of post-operative pulmonary abscess and pneumonia. (This method would not be suitable for any operations on the nasal passages or sinuses. S.B.)

SIDNEY BERNSTEIN.