ABSTRACTS

THE EAR.

The Preventive Medicine of the Ear. SOMERVILLE HASTINGS, M.S., F.R.C.S. (*Brit. Med. Journ.*, 14th March 1925.)

Although the author is not sanguine regarding the results of treatment for deafness of long standing, he advocates the correction of anything that can be considered as contributing to the deafness, in the hope of at least arresting further progress. Especially where the hearing varies from day to day, or where improvement is obtained by inflation, the airways must be freed from any obstruction. His paper is chiefly concerned with prevention of deafness, and appropriately so as it was addressed in the first instance to the Society of Medical Officers of Health. He emphasises the importance of examining for adenoids in every case of earache, of removing adenoids in every case of aural suppuration complicating scarlatina, as also before discharging from hospital a child admitted for mastoiditis. He quotes Sir George Newman's report and other statistics to show that otorrhœa among children of school age has been reduced by one-half at least in ten years, but that the proportion at the age of admission to school remains unchanged. This argues the need for greater attention in the earliest years, and every baby with symptoms suggesting earache, or with signs of difficulty in breathing or suckling, should have the nasopharynx investigated. At this age adenoids can be curetted without an anæsthetic and without upsetting the child. Children should be systematically taught how to blow their noses—with the handkerchief held below the nose not pressed against it. After the adenoid operation, attention should also be paid to deep breathing exercises.

T. RITCHIE RODGER.

On the Function of the Stapedius Muscle. W. E. PEREKALIN, Leningrad. (*Zentralblatt für Hals-, Nasen-, und Ohrenheilkunde*, 10th January 1925.)

Of the physiology of the stapedius muscle but little is known. Contraction of the tensor tympani muscle tends to interfere with hearing, particularly in the case of lower tones. Contraction of the stapedius, the antagonist of the tensor, tends to make hearing better. The author has investigated this theory on twelve patients who were suffering from facial paralysis due to cold, and determined their hearing acuity with the complete range of tuning forks. In all cases paralysis of stapedius lessened the acuity, particularly in the case of low tones. It was also found that the action of the muscle assisted in the

perception of whispering and of complicated sounds. In cases of paralysis it was also found that the conduction by bone was lessened. The author considers that the stapedius comes into play when the effort to hear is made. F. C. ORMEROD.

On Atypical Mastoiditis Acuta (*Mastoiditis without Perforative Otitis Media Acuta*). HANS BEEGER, Dresden. (*Acta Oto-laryngologica*, Vol. vii., fasc. 1.)

During a period of two and a half years 18 cases of atypical mastoiditis of this kind were operated upon in Dr Mann's clinic, and during that time 101 normal cases were also dealt with. The atypical form differs from the latter as follows: Subjective symptoms of labyrinth irritation and intracranial complications were lacking. There were always objective symptoms on the mastoid. Hearing as a rule was good, sometimes excellent. The type of mastoid was always pneumatic. There was much bone destruction. Infection apparently passed straight from the Eustachian tube to the antrum and mastoid, causing such rapid formation of granulations in the antrum as to block the aditus. H. V. FORSTER.

Radical Operation without a Plastic Operation on the External Meatus. R. BÁRÁNY. (*Acta Oto-laryngologica*, Vol. vii., fasc. 1.)

The author compares the good therapeutic results of the simple mastoid operation with the less satisfactory results of the radical procedure, owing in the latter case to chronic middle ear suppuration. He refers to the difficulties in obtaining a cure after the typical radical operation with plastic flap, and considers that apart from troubles in the lining of the cavity the functional result leaves much to be desired.

A better functional result might be obtained in some cases by dealing in a more conservative manner with the middle ear contents, but this would not avoid the other disadvantages.

Since the autumn of 1921 Bárány has not cut the meatal flap in radical operations. The antrum and attic are opened up and the posterior bony meatal wall taken away without disturbing the soft lining. Local anæsthesia is often employed, and good illumination is necessary to operate in this delicate way. The incus is generally taken away, but not often the whole malleus. It is necessary to insert a cigarette drain in the mastoid incision and to support the meatus with a cotton-wool plug. An attempt is made before operation to clear the tympanum of obvious granulations and to improve its condition by washing out.

He refers to his book on the subject. (Published by J. Denhcke, Leipzig and Vienna, 1923.) H. V. FORSTER.

Abstracts

On the Primary Covering of the Bone Wound in the Radical Operation for Middle Ear Suppuration. Dr ADOLF SCHULZ, Danzig. (*Archiv. für Ohren-, Nasen-, und Kehlkopfheilkunde.* Band 112, Heft 2, December 1924.)

An incision is made in the groove behind the pinna from the temporal line to the tip of the mastoid. The radical mastoid operation and plastic operation on the meatus are performed in the usual manner. An incision parallel with the first is made in the hair-line, two centimetres longer than the cavity in the bone, as measured by the probe. The lower limits of these two incisions are joined, and the resulting tongue of skin, attached above, is displaced into the mastoid cavity by a tampon which emerges from the meatus. Some three fingers' breadth further back on the scalp is made a V-shaped incision, with apex posteriorly, its divergent ends as far apart as the upper and lower borders of the concha. Its edges are freely undermined and brought together in the form of a horizontal Y. The original incision is closed. The tampon is removed on the fifth day and the pedicle divided in the third week.

The author reserves this modification for "interval" operations in chronic cases, where all diseased bone has been removed. He has performed it on sixty-two occasions, finds the convalescence much shortened, and specially commends it in cases where the dura mater has been exposed. WM. OLIVER LODGE.

Do Attacks of Giddiness or Nystagmus occur as a Neck reflex? R. BÁRÁNY. (*Acta Oto-laryngologica*, Vol. vii., fasc. 1.)

In Vol. vi., fasc. 1-2, page 99, of *Acta Oto-laryngologica* is a treatise by A. de Kleyn and C. Versteegh with the title "Attacks of Vertigo and Nystagmus in a Certain Position of the Head."

Bárány suggests that in a case described in this article the influence of compression of blood vessels in the neck has not been taken into consideration as a possible cause of the vertigo and nystagmus. After referring to cases in which pressure on the carotid had caused nystagmus, he further discusses the subject and concludes as follows: "The question whether vertigo and nystagmus can be caused by a neck reflex is therefore completely open, and I would rather believe that attacks of vertigo and nystagmus produced by neck reflexes do not occur." H. V. FORSTER.

On the Symptomatology of Disease of the Otoliths. Dr TIBOR GERMÁN. (*Monats. für Ohrenh.*, 1924, Vol. ii.)

The clinical pictures presented by affections of the otolith apparatus are not yet very clear. There is, however, a possibility of obtaining much help from the communications already made by Magnus and de Kleyn.

The picture is difficult to interpret owing to the phenomena associated with the neck reflexes and volitional influences, and the necessary extra difficulties that arise thereby in man, owing to the inability to isolate these in a clinical investigation, as compared with the definite elimination of the same in experimental work on animals. The following case is quoted in illustration. A woman of 53 was admitted to hospital 2nd June 1923; in her previous clinical history the only important points noted were an old standing general enteroptosis and a recent anæmia; for the latter she had been treated with arsenic and sulphur, but had taken them in larger doses than had been prescribed.

Early in April she noticed that when attempting to turn upon the left side previous to going to sleep, such a feeling of giddiness occurred that she at once sat up; since then she could no longer lie on the left side. Apart from this she experienced only very occasional and very slight giddiness when standing and walking, and usually less marked in the mornings.

At the commencement of these symptoms she was unable to look upward and to the left without immediately feeling giddy, a condition which was relieved if she held her head in some other position. The giddiness continued if the head were retroflexed whilst she sat erect, or while lying on the back with the head erect, or when leaning the head to the left. She was therefore afraid to lie down, and had to be most careful that she lay on the right side, adopting various precautions so that she would avoid turning on the left side or on her back during sleep.

Examination.—Tympanic Membranes intact; bilateral slight labyrinthine deafness. Whisper *right* at two metres, *left* at three metres. *Rinne*, positive. *Bone conduction*, both sides slightly reduced; slight rotatory nystagmus in each direction; no by-pointing. *Romberg*, negative. *Caloric response* on each side was good; *rotation* to the right with the head and body erect and the head fixed caused slight giddiness with increase of the spontaneous nystagmus for twenty-seven seconds, while rotation to the left caused more marked giddiness and an increase of the spontaneous nystagmus for twenty seconds.

With the patient sitting erect, and the head bent back, giddiness at once was produced, accompanied with eye movements of greater amplitude, the exact character of which could not be determined as the patient held her eyes tightly shut.

On leaning the head towards the left a feeling of severe giddiness occurred and rotatory nystagmus of the third grade, which persisted as long as the head was maintained in this position; this could only be continued for ten seconds, owing to the accompanying discomfort. These phenomena could always be induced with the

same alteration in the position of the head, although the intensity was lessened and the intervals between the experiments had to be lengthened. The phenomena could be induced also by placing the patient in the left lateral position without rotation of the head on the trunk. If turned on her stomach similar attacks could be induced, if the head were retroflexed, but these were accompanied with only a slight giddiness without nystagmus.

On the other hand, while in this position a typical attack was evoked, if the head were turned to the right.

The dynamometer gave the following figures, as regards the muscle tonus in the upper extremities, between the attacks: Right, 50; left, 18 to 20. During the attack, right, 40 to 44; left, 2 to 10. After the attacks, right, 44 to 48; left, 11 to 20.

An exhaustive examination of the eyes, nervous and other systems, gave a negative result.

By the 15th of July she gradually began to improve, and by the 12th of October was apparently free from attacks of giddiness, and was otherwise quite well, with the exception of some pain, which she referred to her neck.

In commenting on the various symptoms which appeared in this case, the author considers that the investigations and theories of Magnus and de Kleyn in connection with their experiments on animals offer a tenable explanation. As regards the etiology the cause must be assigned in these cases to some pathological condition of the middle or inner ear, causing alteration in the pressure of the labyrinthine fluids. In this particular case he suggests that the condition was due to the toxic effects of the excessive doses of arsenic.

In conclusion, he suggests that all such cases should be examined as regards the effects of position on the symptoms and signs of giddiness, and also that the tonus of the musculature of the extremities should be measured and compared on the two sides.

ALEX. R. TWEEDIE.

THE NOSE.

The Correction of Certain Nasal Deformities by the Method of J. D. Lewis. L. BALDENWECK and J. ARVILLIER. (*Archives Internationales des Laryngologie, etc.*, January 1925.)

Deformities of the nose due to lack or excess of tissue are not infrequently met with. The technique of J. D. Lewis consists in insertion of a celluloid splint (mould) graft.

An incision is made along the edge of the columella by means of an elevator or scissors, and a subcutaneous pocket is made in the tissues at the tip of the nose. This is important, as it lodges the end of the graft which is thus separated from the actual suture. By means

of thin scissors or elevator, a subcutaneous track is then burrowed along the anterior face of the nose to the glabella, taking care to keep in the mid-line. The graft suitably fashioned is then inserted and the small incision sutured.

The advantages claimed for the incision are that it gives good access and yet, after healing, is practically invisible; further, celluloid as the material for the graft can be had in any quantity, and does not necessitate a costal incision, etc., nor yet further nasal operation if septal cartilage is used. Provided the celluloid is satisfactorily buried it is always well tolerated.

Commercial celluloid is obtained in slabs sterilised by formalin vapour at the operation or in advance, and made pliable, etc., by means of acetone. J. B. CAVENAGH.

[The method appears to embody the principle laid down by H. D. Gillies.—Eds.]

Prophylactic and Curative Treatment of Intranasal Adhesions. Dr SPALAIKOVITCH. (*Revue de Laryngologie, etc.*, 15th February 1925.)

The number of different substances suggested as a means of preventing the occurrence of adhesions in the nasal cavity, is a testimony to the inefficiency of most of them.

The various methods are shortly described from the cotton plugs suggested by Lennox Browne, in 1864, to the strips of celluloid used by Garel in 1893, but it is not till 1912 that the ideal substance for this purpose was discovered by Moure, viz., mica.

The advantages claimed for this material over others is that it can be used in very thin layers, does not impede the flow of secretions, is not irritant to the tissues, and can be easily sterilised by means of heat.

In order that it may be used equally well for adhesions in the upper part of the nasal cavity as well as in those lower down, the author has conceived an ingenious standard shape into which the piece of mica can be cut; this is in the shape of a kidney bean cut from a rectangle roughly 2 in. by 1 in. It is inserted (concavity downward) into the nostril which, for this purpose, must be slightly stretched in a longitudinal direction. The mica remains *in situ* without an attached thread.

It does not interfere with the use of an alkaline douche two or three times a day, and only requires inspection every four days or so. It should accomplish its work in about a fortnight, when it can be removed without difficulty. J. B. CAVENAGH.

The Treatment of Ozæna by High Frequency Current and Spark. Dr LEROUX-ROBERT. (*Revue de Laryngologie, d'Otologie, etc.*, 15th December 1924.)

As the result of repeated trials the author, together with half a dozen others who have been working on the same subject, have

come to the conclusion that not only the fetor but also the crust formations and fronto-orbital pains of atrophic rhinitis can be suppressed by means of application of high frequency current, leaving behind a pink moist hypertrophied mucous membrane.

All the cases under observation had been subjected to bacteriological examination, and without exception were found to contain the coccobacillus fœtidus ozænæ of Perez and the coccobacillus mucosus of Abel-Lœwenberg. Experiments *in vitro* proved how fatal the high frequency current proved to these organisms.

The application of the current to the nasal cavity is made by three types of electrodes:—

(1) A thin flat vacuum glass electrode for introduction into the nasal cavity from in front.

(2) A glass vacuum fan-shaped and set at an angle with the shaft for application to the nasopharynx.

As these glass electrodes were found limited in their utility, it became necessary to employ a flexible metal electrode suitably insulated by a deposit of a kind of "linoleum" on its surface.

Technique.—The nose is first painted with a solution of formalin, which causes intense secretion detaching crusts, etc., without causing hæmorrhage. The insulated electrode is then introduced and current of a certain tension is allowed to pass for four or five minutes. The areas especially affected are "brushed" by the electrode and the nasopharynx similarly treated by its special electrode. Applications can be made daily.

Under this treatment pale dry mucous-membrane becomes pink and hypertrophic, mucous secretion increases, the "crusty" area diminishes in size, crusts becoming very thin and inodorous. Results are very favourable in almost every case, and are more or less rapid and complete. The fetor especially when it has resisted other forms of treatment disappears entirely, and in cases in which a douche may have been necessary three or four times a day, one weekly will often suffice. J. B. CAVENAGH.

THE PHARYNX.

Contribution to the Study of Naso-Pharyngeal Fibromata in Women. JUSTO M. ALONSO. (*Acta-Oto-laryngologica*, Vol. iii., fasc. 1-2, February, 1924.)

A woman of 45 with complete absence of nasal respiration, showed on examination a large tumour, which filled the nasopharynx and the left nasal cavity, and which displaced the soft palate forwards and downwards and the septum markedly to the right. After ligature of both external carotid arteries and tracheotomy, the tumour was

removed by Kocher's method. Recovery took place without facial deformity or persistent difficulty in mastication or deglutition. The dimensions of the tumour were: $7\frac{1}{2} \times 7 \times 8$ cm.

Histological examination demonstrated that the tumour was a fibroma. Nasopharyngeal fibromata are rare in females of a certain age. One finds them, however, as late as the sixtieth year. The author describes several operative procedures and adds an important bibliography. H. V. FORSTER.

Clinical and Experimental Investigations on the Etiology of Joint and Muscle Rheumatism, with particular Reference to Tonsillogenous Infection. REIDAR GORDING, Christiania. (*Acta Oto-laryngologica*, Vol. vi., fasc. 3-4.)

Our present conception of rheumatic pains receives its stamp from focal infection. The idea of focal infection is associated in America with the name of Billings, and in this country with that of Poynton and Payne, but more recently a great deal of experimental work has been done in America by Rosenow. The modern theory suggests the focus of rheumatic infection to be in the nasal accessory sinuses and the roots of the teeth, but above all in the throat and its tonsils.

Organisms in the tonsils may be harmless unless physical or psychical conditions cause virulence. Rosenow suggests the transmutation of causal organisms. Lillie and Lyons, America, recommend complete removal of the tonsil with plica in every clear case of myosititis and arthritis. They expect improvement in 79 per cent. of cases. A history of tonsillitis, though valuable, is not necessary. Crowe, Watkins, and Rotholz do not advise tonsillectomy in stubborn cases of rheumatoid arthritis: but in (1) infective arthritis with periarticular signs, (2) in myalgia, and (3) acute polyarthritis (rheumatic fever) they have had favourable results from tonsil removal.

Other authors are more reticent.

The writer then proceeds to go fully into his work with Sanberg at the health resort at Sandifiord-Bad, Norway.

He classifies his rheumatic cases into four different types, and further subdivides each group into (*a*) tonsillogenous, (*b*) non-tonsillogenous.

Under thirty-five years of age there was a large percentage of group (*a*) and, over forty years, a large percentage of group (*b*).

The tonsillogenous cases were those giving either a history or objective signs, or both, of infection of the tonsils.

The author deals with bacteriological work done during the investigation, including methods of culture of organisms and animal experiments. H. V. FORSTER.

Abstracts

Some Observations on the connection between Tonsillitis and Infections called Acute Rheumatism and Acute Hæmorrhagic Nephritis. S. H. MYGIND, Copenhagen. (*Acta Oto-laryngologica*, Vol. vi., fasc. 4.)

In material examined by the author quite a number of cases of acute rheumatism and acute hæmorrhagic nephritis have been found associated with acute and chronic tonsillitis.

In the rheumatic cases, however, a fair percentage show no clear etiology, which is not the case with the nephritic ones where tonsillitis or some other focal infection has been traced in all but a few.

He favours the view developed by Weintraud that rheumatic fever is not a specific infection but a specific reaction of absorbed bacterial proteins, or proteins of the organism which have become changed and foreign in nature in their struggle against bacteria.

Rheumatic fever, however, can be combined with bacteræmia, in which case the organisms lodge in places already damaged by rheumatic toxins. Libman has demonstrated this in endocarditis. Such complications are more often produced after the rheumatic fever has ceased.

The author suggests that these toxins are absorbed from the adenoid tissue of the upper respiratory tract—the tonsils in particular—when the tissue is overwhelmed by inflammation and its normal function disorganised. H. V. FORSTER.

On Adenoid Growths and Exudative Lymphatic Diathesis. VIGGO SCHMIDT, Copenhagen. (*Acta Oto-laryngologica*, Vol. vi., fasc. 3-4.)

This article deals with an investigation to find out if there is any definite relation between the occurrence of adenoid growths in children and that condition described by Czerny eighteen years ago, and called the Exudative Lymphatic Diathesis.

Children with this diathesis suffer from symptoms which have been explained as exudations of the skin and mucous membranes. For example, herpes, eczema, rhinitis, laryngitis, and bronchitis, etc. Hypertrophy of the lymphatic tissue of the naso-pharynx and pharynx is also described. The author finds as a result of his investigation that children coming to Oto-Laryngological Clinics with adenoid growths as a rule do not suffer from this diathesis, and belong to a different category from those, some with adenoid hypertrophy, whose exudative symptoms cause them to be taken to the pediatrical clinics.

H. V. FORSTER.

The Pharynx

Paralytic Syndrome of the Last Four Cranial Nerves following Neuritis from Peritonsillar Abscess. V. PALUMBO. (*Arch. Ital. di Otol.*, Vol. xxxv., October 1924.)

A married woman of 33 had a severe peritonsillar abscess on the right side. Her previous health had been good. The abscess burst in four days, and while her general condition improved immediately, it was noticed that her voice had changed and become nasal, rendering her speech almost unintelligible. There was also extreme difficulty in swallowing both solids and liquids, the food returning through the nose. There were also some deafness and subjective noises in the right ear. On examination of the throat, the uvula was seen to move to the left on phonation, and at the same time there was a curtain-like movement of the posterior pharyngeal wall to the left. The tongue showed slight fibrillary twitching, and when protruded deviated to the right. Taste was normal. The movements of the vocal cords were normal and there was no loss of sensation. The pharyngeal and laryngeal reflexes were retained. After a little over two months the paralysis disappeared. There was no history or other sign of lues.

There were three possible explanations: (1) Pressure on the nerves by the swelling surrounding the abscess; (2) Infection and inflammation of the lymph nodes in the space behind the styloid process; (3) Invasion of this space by the actual abscess. The author inclines to the second hypothesis as the cause of the nerve involvement.

J. K. MILNE DICKIE.

The Use of Sulpharsphenamin in Vincent's Angina and Stomatitis in Children. LOUIS H. BARENBORG, M.D., New York, and MAX W. BLOOMBERG, M.D., Montreal. (*Journ. Amer. Med. Assoc.*, Vol. lxxxiii., No. 1, 5th July 1924.)

The authors discuss the value of intramuscular injections of sulpharsphenamin in treatment of Vincent's angina in children. They have obtained excellent results in a series of 15 cases in children between the ages of 22 months and 4 years. Eight of the children were given intramuscular injections alone, and the other seven received local applications of sulpharsphenamin three times daily as well. No patient required a second injection. The average duration of disease in the cases receiving injections only was $6\frac{1}{2}$ days, and in those who were given the local treatment as well, about 4 days. The most marked improvement in these cases treated by injection appeared on the third or fourth day after the treatment.

The writers also give a series of 27 cases of stomatitis treated by the same method in children between the ages of 2 and 4 years with like successful results.

PERRY GOLDSMITH.

Abstracts

The Waring Suction Tonsillectomy. By Dr J. B. H. WARING. (*Laryngoscope*, Vol. xxxiii., No. 8, p. 587.)

The author uses a tonsil suction apparatus, which he has modified, to pull the tonsil out of its bed completely. A snare or guillotine is slipped over the suction tube around the now prominent tonsil which is enucleated, by rapid or slow methods. The operation is applicable to all types of tonsils, but demonstrates its superiority in small children, especially on small, deeply buried or adherent tonsils. The advantages of this method are that it is very simple in execution, rapid, bloodless, the field of operation is easily observed, and there is no tendency for the tonsil to crumble when grasped. It may be used in operations under local anæsthesia but has an advantage in general anæsthesia, as blood and secretion may be sucked away.

ANDREW CAMPBELL.

Tonsillectomy. T. B. JOBSON, M.D., B.Ch. (*Practitioner*, August 1924.)

Guillotine tonsillectomy is compared to the golf shot. Both look easy, but they are by no means as easy as they look. The golfer plays the shot over and over again for weeks and months until he learns to execute it with some degree of accuracy. The guillotine operator has to remove many hundreds of tonsils before he develops real skill. With the guillotine, complete enucleation should be achieved in 95 per cent. of cases including adults.

Allusion is made to the original paper of Drs Whillis and Pybus in 1910, where the modern "reverse" method of tonsillectomy is described. This method is contrasted with that of Sluder.

The author claims for modern guillotine tonsillectomy, after skill is acquired, the following advantages over the dissection method:—

1. Greater speed: In hospital twelve cases can be done in the hour with ethyl chloride anæsthesia. This is a great saving of hospital time.

2. Less anæsthetic risk: Dissection requires much deeper anæsthesia for a longer time.

3. There is also less bleeding.

4. Less trauma and subsequent scarring.

AUTHOR'S ABSTRACT.

Hæmorrhage during Dissection of the Faucial Tonsils. NORMAN PATTERSON. (*Lancet*, Vol. i., p. 604, 1925.)

The author defines the aim of technique as the removal of the tonsil in its capsule with as little damage as possible to the mucous membrane and with the resulting fossa absolutely free from bleeding. His method is to free first the lateral part of the tonsil, leaving the

poles until the last. He then clamps the vessel-carrying tissues of the upper pole before dividing them. The tonsil is then freed and the inferior pole clamped in the same way. The pedicles, after division, are ligatured. MACLEOD YEARSLEY.

The Surgical Control of Bleeding following Tonsillectomy. Dr J. J. RAINEY. (*Laryngoscope*, Vol. xxxiii., No. 6, p. 446.)

Nine hundred and seventy eight cases have been operated on under ether. General anæsthesia is preferred because the patient is under absolute control, especially if a severe hæmorrhage occurs. There is not the nervous shock which we frequently see in patients operated on by local anæsthesia. Post-operative hæmorrhage is more apt to occur after local than after general anæsthesia if vessels are tied off as a routine measure. Only two cases of post-operative hæmorrhage from tonsils and one from adenoids were experienced in this series. After the removal of tonsils the most severe point of hæmorrhage is in the upper part of the tonsillar fossa, and without a pillar retractor it is almost impossible to secure it. Bleeding points may be found in the anterior and posterior pillars and in the lower part of the fossa nearest the tongue.

The technique of the operation is as follows: The tonsil is seized with a tenaculum and an incision is made in the mucous membrane above the upper pole by curved blunt scissors and continued half-way down the anterior and posterior pillars. The points of the scissors are then closed and the tonsil dissected bluntly, a snare is slipped over the tonsils and slowly closed. A round sponge is held firmly for a few minutes and on removal the pillar retractor exposes the whole field, and bleeding points are searched for especially at the upper pole where one or two ligatures are usually necessary. All the bleeding points are ligatured. Very little blood escapes into the pharynx if the assistant is skilful in sponging and the suction apparatus is not considered necessary. A special hæmostat notched at the end is very useful as the catgut is run over the notch; it is thus easy to apply the ligatures by means of the index of the left hand pushing the knot home while traction is made with the right hand. In order to tie a ligature in the lower pole it is better to stand at the head of the patient. ANDREW CAMPBELL.

A Case of Tonsillectomy in a Boy with Congenital Heart Disease. S. G. PAPADOPOULOS. (*Lancet*, 1925, Vol. ii., p. 176.)

The author records the case of a boy of 15, with an unusual type of hæmorrhage following operation for tonsils and adenoids. He suffered from otorrhœa, obstructed breathing, frequent colds with

bleeding from tonsils and pharynx, and congenital heart disease due apparently to patent foramen ovale. After operation he had secondary bleeding, and later passed pure blood per rectum. He made an uninterrupted recovery and was greatly improved by the operation. The reporter ascribes the bleeding to poor coagulability due to mixing of venous with arterial blood. The effect of the injection of coagulen ciba was noteworthy. MACLEOD YEARSLEY.

Adenotomy and Tonsillotomy with Local Anæsthesia. W. TONNDORF, Vienna. (*Zeitschrift für Hals-, Nasen-, und Ohrenheilk.*, March 1925, Vol. xi., Part 1.)

The author states that effective local anæsthesia can be produced by four punctures, two corresponding to the orifice of exit of the palatine nerves from the second division of the fifth, just behind the posterior margin of the hard palate but to the side, and in a line with the last upper molar tooth. The other two are lateral into the back wall of the pharynx, behind the posterior faucial pillars and at the height of the base of the uvula. The latter are intended to reach the nerve-fibres derived from the glosso-pharyngeal, vagus and sympathetic nerves and extending to the pharyngeal plexus. These two retro-faucial punctures are said to be useful in examination and manipulation of the hypo-pharynx and larynx, the trachea, and the œsophagus. For the four punctures, 2 c.c. of a 2 per cent. novocain-suprarenin solution suffice. JAMES DUNDAS-GRANT.

The Treatment of Malignant Tumours of the Pharynx and Naso-pharynx. GORDON B. NEW, M.D., Rochester, Minnesota. (*Surgery, Gynecology, and Obstetrics*, 1925, Vol. xl., pp. 177-182.)

A study of 136 cases of malignant tumours of the pharynx including the tonsils, seen or treated in the Mayo Clinic from 1917 to 1923, of which 79 were epitheliomata; 37 lympho-sarcomata; 14 mixed tumours; 3 malignant tumours of indeterminate type; and 3 sarcomata of special type. A further 119 cases of malignant tumours of the naso-pharynx are also recorded, consisting of 60 epitheliomata; 43 lympho-sarcomata; and 16 tumours of indeterminate type.

The author refers to the importance of the microscopic gradation of epitheliomata described by Broders—according to their degree of malignancy, as a clinical aid in determining the best treatment for each case, also the prognosis.

Malignant tumours of the pharynx and naso-pharynx are usually of a very high grade of malignancy—either epitheliomata or lympho-sarcomata.

The treatment should consist of surgery, cautery or diathermy, radium, X-rays, or any combination of these.

Discretion is necessary in the selection of cases in which the tumours are very extensive, as in certain cases treatment is detrimental rather than helpful.

Mixed tumours of the pharynx should be removed surgically if possible, and other forms of treatment only used if these cases are inoperable.

A number of Tables are published showing the results of treatment, and the average life following both the treated and untreated cases.

IRWIN MOORE.

THE LARYNX.

On an Anatomical and Pathological Structure of the Larynx. Dr E. F. JOSEPHSON. (*Laryngoscope*, Vol. xxxiii, No. 9, p. 699.)

The author describes a structure which constitutes a swelling in the wall of the larynx, oval in shape and situated a little below the crico-arytenoid joint and processus vocalis. It consists of an upper and a lower lip bordering a central depression. This depression is a fairly deep and large sinus into the depths of which opens a duct draining a group of glands. The glands lie between the mucosa and the musculus vocalis and are of two types, one resembling the ordinary mucous gland and the other similar in structure to the salivary glands but differing from them in being of compound tubular structure. Pathologically infection of these glands on one or both sides may cause laryngeal stenosis. The author has had a case where he has found it necessary to enucleate these glands for stenosis of the larynx. It is claimed that pachydermia laryngis owes its pathology to this structure.

ANDREW CAMPBELL.

Some Observations on Immunity in Tuberculosis of the Upper Air Passages. Prof. Dr FELIX BLUMENFELD. (*Zeitschrift für Laryngologie, Rhinologie, etc.*, September 1924.)

The article deals with various problems concerning immunity and natural resistance against tuberculosis, especially as it applies to infections of the upper air passages. These infections, the commonest of which is tuberculosis of the larynx, in many ways constitute a pathological problem entirely different from chronic tuberculous processes in other organs, *e.g.* lungs, skin, bone, glands. The tubercle bacilli gain an entrance through a more or less intact mucous membrane, they settle in the submucosa, and at first cause a proliferation of fibrous connective tissue. This breaks down, causing ulceration. Giant cell systems with caseating centres are most typically seen in sections of a tuberculous larynx, as they are characteristic of this breaking-down stage. There is no tendency to scarring or narrowing

by contraction in the evolution of tuberculous lesions in the larynx or neighbourhood, in marked contrast to the fibrous scarring seen in healing lung lesions or in lupus, whether of the skin or of the mucous membranes. This occurs notwithstanding the fact that the tissues around the glottis contain an abundance of elastic fibres, which are identical with the elastic fibres found in lung tissue, so far as staining reactions can show. The secondary contraction of fibrous tissue is evidence of natural resisting power. Blumenfeld therefore concludes that, in general, tuberculous lesions of the upper respiratory tract—*i.e.*, those which have occurred secondarily to lung lesions or "aufsteigend" —belong to a stage of the disease where the immunity powers are low. He calls this stage the tertiary one, as against a secondary stage, of which lupus is said to be a typical example. This would explain why a laryngeal lesion so seriously darkens the outlook in a case of tuberculosis. Even if the lesion is slight, a patient automatically drops down one group, as regards prognosis of ultimate survival, as Sir St Clair Thomson has so clearly brought out in his recent lecture (*Brit. Med. Journ.*, 8th November 1924). Tuberculin when used in the "secondary" period causes a marked focal reaction, which may lead to healing. When it is used in the "tertiary" period, the lesions generally show very little change, and the patient reacts badly, as shown by temperature.

The author then discusses therapeutic measures in the light of these considerations. It is evident that any form of tuberculin is contra-indicated. The stimulation of the natural resisting powers is the aim of all therapy, for which the comprehensive term "Reiztherapie" is used. It includes such varied forms of treatment as administration of metallic preparations (gold, copper), caustics, galvanocautery, X-rays. These latter, according to the author, act by destroying a certain amount of tissue *in situ*. The general chemical and biological reactions required to remove the dead tissue increase the immune bodies in the circulation. The local applications are badly borne or do no harm, when too much tissue is destroyed and the patient's reacting powers have been overestimated. Heliotherapy rightly occupies the first place among therapeutic measures, whether the natural method is used or artificial light baths. The reaction again is a general one, probably produced through the skin, and the light applications should not be concentrated on the lesions, but applied to the whole body.

J. KEEN.

The Question of Immunity in Laryngeal Tuberculosis. Dr JOSEF BUMBA, Prag. (*Zeitschrift für Laryngologie, Rhinologie, etc.*, November 1924.)

The subject is the same as that dealt with by Blumenfeld, and in the main outline and principles the authors agree, but there are

also marked differences. Bumba goes into the question of immunity in tuberculosis much more fully, and his paper occupies over one-half of the journal with well over a hundred references.

When considering tuberculosis of the larynx we have up to the present thought in terms of gross pathological changes; the classifications varying according to the picture presented. This the author would like to see altered; a grouping from the point of view of general resistance power of the patient is the better method. This includes the determining of the particular stage at which the disease as a whole has arrived, the laryngeal lesion being only a local manifestation. Two lesions which appear identical clinically may be treated, for example, by galvanocautery. In one patient this leads to healing, in the other the larynx breaks down and the patient rapidly goes downhill.

A very interesting method of determining the resisting power of a patient by means of minute testing doses of tuberculin is given with full details. The causation of tuberculosis of the larynx is fully discussed. The author favours the blood infection theory except in advanced cases, where sputum infection does occur. The latter theory cannot possibly explain the numerous cases where tubercle bacilli are never found in the sputum. We also note a very clear explanation of the primary, secondary and tertiary stages of tuberculosis mentioned in Blumenfeld's article. These are somewhat analogous to the corresponding stages in syphilis. With regard to pathology two tendencies or components are said to be acting according to the condition of immunity.

(1) "*Fremdkörperkomponente*"; the tuberculous focus acts like a foreign body and an irritant, when conditions are favourable; hypertrophy occurs, due to round and spindle cell infiltration, excrescences, tumour formation and so on.

(2) *Toxic components* predominate when the resistance is poor and clinically we see marked inflammatory reaction and ulceration.

J. KEEN.

Amyloid Tumours of the Larynx. Professor A. BARROUD, Lausanne. (*Revue de Laryngologie*, January 1925.)

The writer reports two cases of that rare condition amyloid tumour in the upper air passages. Some 63 cases in all have been recorded up to the present, but it is suggested that not all of those reported should be accepted as coming under this heading. One of the cases was a man, aged 30, the subject of chronic nephritis. The tumour of the larynx had been under observation for six years, and several operations for partial removal had been undertaken.

The clinical characteristics of these tumours are extreme chronicity, painlessness, and absence of any symptoms other than those due to

mechanical obstruction. Their consistency is variable, usually rather soft. The most marked feature is a glistening surface and translucency of the submucous infiltration. They may be single, or multiple; localised, or infiltrating. They do not form metastases. Histologically they are recognised by the mahogany staining when treated with iodine solution, and the characteristic amyloid staining with methyl violet.

Similar tumours occur in the conjunctiva and colon. Association of localised amyloid tumour with general lardaceous disease is uncommon.

No record of any case observed in this country is cited.

G. WILKINSON.

Anastomosis of the Recurrent Laryngeal Nerve with the Descendens Noni, in Cases of Recurrent Laryngeal Paralysis. CHARLES H. FRAZIER, M.D. (*Journ. Amer. Med. Assoc.*, Vol. lxxxiii., 22nd November 1924.)

Encouraged by evidence of returning function in the vocal cords in the two cases already operated upon and previously reported (*Annals of Surgery*, Vol. lxxix., February 1924), the writer, in co-operation with Dr Chevalier Jackson, has continued his observations upon the subject of anastomosis. Twelve patients with vocal cord paralysis have passed through the clinic. In nine of the cases the paralysis was of traumatic origin, having followed operation upon the thyroid gland. Six have been operated upon. In three, function is already returning, while the others have been dealt with too recently to warrant a report.

The writer discusses several points which have an important bearing upon the question of surgical interference in this class of case. Great care should be exercised in the selection of cases, as in consequence of failure in inappropriate cases, the procedure may fall into disrepute. What is the relation of the restoration of function after operation to the duration of the paralysis? This question cannot be answered in definite terms of months and years. It must be assumed that there is a remnant of muscle tissue. With complete atrophy and fibrosis, return of function after nerve suture would be obviously out of the question. Success also will depend on the free mobility of the crico-arytenoid joint. To determine the degree of mobility of the joint, passive motion is made with laryngeal forceps by means of direct laryngoscopy. The third essential for success is the presence of a segment of the nerve undamaged and a centimetre or more below its point of bifurcation.

The indications for the operation up to the present time have been two; to enable the patient to dispense with a tracheotomy tube and to restore normal phonation. The question has arisen as to whether, in cases of paralysis not due to trauma, an attempt at relief

by operation is justifiable. In one case in the writer's series, the operation was performed when the lesion causing the vocal cord paralysis was not of traumatic origin. A specific cause was assumed, but not proved. If this class of case is to be regarded as suitable, it at once opens up a much larger field for the operation under discussion.

The operation for the relief of recurrent nerve paralysis is founded on sound physiological principles, it has no insurmountable technical difficulties, and it promises a reasonable hope of success. The question may arise in this particular field as to whether a "lateral implantation" will be as effective as an "end-to-end" suture. This can only be answered by studying the results of operations on other nerves. In the case of other cranial nerves and of the peripheral nerves of the extremities, lateral implantation has unquestionably been followed by functional recovery. In the case of the recurrent laryngeal nerve, this method is more difficult because of the slender proportions of the nerve. It ought, however, to be the operation of choice in cases in which the evidence of total paralysis is lacking. One might hesitate to cut the recurrent laryngeal nerve in order to effect an end-to-end approximation with the descendens noni, in case, should regeneration not follow, the patient's condition might become worse than it was before interference.

The operation of "neurotization" has been employed experimentally and with a measure of success. Hoessly (*Beitr. z. Klin. Chir.*, xcix., 1916) having previously resected the recurrent laryngeal nerve, implanted directly into the adductor muscles a branch of the spinal accessory through a fenestra in the thyroid cartilage. In two of the three animals, a cadaveric cord was converted into one having the posticus position and a hoarse bark became a normal phonation. While the principle of the operation is sound, there can at best be only partial restoration of function, that is in the adductor group; whereas in the procedure carried out by the writer, there is a potential possibility of functional return in all the muscles supplied by the recurrent laryngeal nerve. A. LOGAN TURNER.

On the Possibility of restoring Movement to a Paralysed Vocal Cord by Nerve Anastomosis. LIONEL COLLEDGE, M.B., F.R.C.S. (*Brit. Med. Journ.*, 21st March 1925.)

The results of the experiments described were observed by means of Jackson's laryngeal spatula, using the size designed for a child. The first anastomosis tried was with the vagus, four animals being operated upon. Some innervation of the muscles was obtained, but no spontaneous movement. The descendens noni was next used,

an end-to-end anastomosis with the recurrent laryngeal, four animals again being subjected to treatment, with the same result. Anastomosis with the phrenic, however, gave distinctly better findings. In three of four effective experiments spontaneous movement of the paralysed cord was present during quiet respiration a few months after operation.

T. RITCHIE RODGER.

REVIEWS OF BOOKS

La Biopsie Clinique en Oto-Rhino-Laryngologie. Docteur ANDRÉ AUBIN. With 39 illustrations. Pp. 334. Paris: Vigot Fréres. 1924.

Biopsy, as distinguished from necropsy, is the examination of tissues removed during life mainly for the purpose of obtaining diagnostic or other information. This may confirm or correct a diagnosis, or it may do neither, the last being the case in the not altogether unknown occurrence of the portion removed not being a fair sample of the diseased tissue. This is all the more likely to occur if the blades of the forceps employed are retracted away from the growth during the act of closure. The œsophagus is probably the most usual site of this mishap. The author describes this and other likely sources of fallacy with unbiased frankness, but, nevertheless, makes out a good case for judicious resort to this method of examination.

He claims that a biopsy may enable one to distinguish the finer nature of the growth removed, and to arrive at important decisions with regard to treatment. Thus, if in a case of carcinoma, the epithelial cells are of the "basal" rather than the "prickle" type, radium may be used with all the greater confidence. The progress of the case under radio-therapeutics may be measured by the changes found in successive biopsies in the direction of sclerosis of the connective tissue and changes in the cells, indicating the degree of salutary reaction to radiation.

The methods appropriate to the organs with which we are concerned are described with an amount of detail which is scarcely necessary for the specialist. The bioptical methods so much called for in the diagnosis of tuberculosis of the middle ear might have received fuller consideration. Many cautions are given as to the possibilities of harm ensuing from the instrumental removal of portions of tissue, and these are particularly emphasised in the case of the œsophagus. The author weighs the pros and cons with wise discrimination, and