

Abstracts

Case of Ulcer of Nasal Septum—PHILIP FRANKLIN, F.R.C.S.
—Male, aged 50, with extensive ulceration of left septal mucosa with the edge raised and oedematous; history of occasional epistaxis during nine months. Wassermann negative.

MR WRIGHT suggested that a piece should first be taken from the thickened edge for microscopical examination.

Dr SYME said he thought that the diagnosis lay between chronic tubercle and malignant disease; on the whole, he thought the ulcer was malignant.

Subsequent data: *Microscopic Report*.—No evidence of tubercle or new growth. The ulcer and underlying cartilage and bone were removed by a sub-mucous resection. On examination one month later the area of removal was seen to be entirely healed.

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Protective and Magnifying Glasses attached to the Binocular Reflector of Clar, V. NASIELL; *Spectacle Magnifier of Gullstrand*, J. W. NORDENSON; *An Otomicroscope*, C. O. NYLÉN; *A Binocular Magnifier*, J. MOLINIÉ; *My Binocular Apparatus for Throat, Nose, and Ear Surgeons*, C. VON EICKEN; *A Stereoscope for Diminishing Inter-pupillary Distance in accordance with Physiological Principles*, E. WESSELY; *The Binocular of Zeiss with Improved Fixation and Lighting*, W. TRENDELENBURG. (*Acta Oto-Laryngologica*, Vol. v., fasc. 4, November 1923.)

Two distinct objects have been aimed at in the construction of the various forms of apparatus described in these papers. The first three, that is, those described by Nasiell, Nordenson, and Nylén are intended to give increased magnification, while serving also the purpose of protecting the eyes of the user against injury by blood, pus or expectorated material. The apparatus, referred to in the other four articles, have the additional and still more important function of rendering possible binocular and stereoscopic vision in the narrow passages with which the throat and ear surgeon has to deal.

Among the apparatus whose chief object is simply increased magnification, the instrument of Nasiell consists merely of a Clar's forehead lamp (with an improved headband) to the hinder surface of whose reflector are attached a series of Zeiss focal lenses of various strengths, supported on revolving carriers so that the power of magnification can be altered as required. The magnification is of

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moderate degree, since high powers necessitate too close an approach to the object under examination; but the author believes that it is sufficient for all ordinary purposes, and that certain other optical instruments designed to give high magnification and binocular vision into deep narrow passages are of use mainly for "experimental microsurgery."

The "Spectacle Magnifier" of Gullstrand, described by Nordenson, consists essentially of a small opera glass for each eye fitted to a spectacle frame. A combination of lenses is employed in place of the simple lenses of Nasiell's apparatus, and, by this means, the working distance is increased and the distortion of the image diminished. The instrument gives a magnification equal to that of a lens of 8 diopters with a working distance of 25 cm. and a clear field of vision of 4 cm. diameter. Higher magnification does not increase the possibility of observing details, as the greater weight of the instrument causes it to oscillate with the pulsation of the carotid, and this tremor counteracts the effect of the greater magnification. The apparatus requires very careful adjustment for the individual user, and Messrs Zeiss, who are the makers, have devised a special frame which allows of both lateral and vertical adjustment of the eye-pieces.

The Otomicroscope of Nylén is intended for the observation of minute details in mastoid operation cavities, particularly the presence of fistulæ of the labyrinth, and small changes in the ossicles and fenestræ. It consists of (1) a holder which is fixed in the mastoid wound after the manner of a self-retaining retractor; and (2) a compound microscope which is attached to one limb of the holder by a ball and socket joint. Graduated scales are provided so that the degree of magnification can be calculated. By means of various combinations all enlargements between 18 and 235 times are obtainable. The light is obtained from an arc-lamp and is concentrated by a lens either directly on the object, or on a mirror which reflects it down into the wound. In using the higher powers of magnification the distance between the objective of the microscope and the object becomes so small that lighting is very difficult, and the author is experimenting with an illuminating apparatus arranged within the tube of the instrument.

As has been already mentioned, the instruments described by Molinié, von Eicken, Wessely, and Trendelenburg are intended not only to magnify, but also to give stereoscopic vision in narrow passages, this being indeed their more important function. By means of a suitable arrangement of prisms the pupillary distance is so much reduced that binocular vision is made possible, even in such narrow passages as the external auditory meatus and the bronchoscope. All these instruments are provided with lenses, which are not only

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desirable in order to magnify the image, but are essential because reduction of the pupillary distance necessarily entails loss of stereoscopic effect, unless it is counteracted by increased magnification. For example, if the pupillary distance be reduced from 66 mm. to 22 mm. the object under examination must be magnified three times in order to preserve the degree of specific plasticity which it would present under normal conditions. Illumination in each of these instruments is provided by an electric lamp which forms part of the apparatus. The paper of Wessely deals in detail with the physical and physiological principles involved in the construction of instruments of this kind, and includes a number of references to the literature of the subject.

THOMAS GUTHRIE.

Labyrinth Deafness, with a New Physiological Division of the Auditory Organ. Docent Dr A. REJTÖ, Budapest. (*Brit. Med. Journ.*, 22nd March 1924.)

This short paper is in the nature of a critical review of the discussion on the same subject at the Portsmouth meeting of the British Medical Association. Reference is made to the admission of the leader of the discussion and subsequent speakers that the tuning-fork tests are often unreliable in distinguishing lesions of the nerve from those of the conducting apparatus, and the author submits "a new physiological division of the organ" as follows:—

I. The conducting apparatus—

A. Physical stimuli transmitted:

- (1) Through the external and middle ear.
- (2) Through the two windows.
- (3) Through the labyrinthine fluid.

B. Physiological stimuli transmitted:

- (1) Through Corti's organ.
- (2) Through the eighth nerve and its tracts.

II. The perceptive apparatus.

Stimuli interpreted in the cortex.

It is stated that the accepted diagnostic indications of nerve deafness—shortening of higher tones and shortening of bone-conduction with positive Rinne—can all be caused by lesions of the windows as well as by lesions of the nerve. "We must limit the value of the tuning-fork tests, otherwise we will cause a general dissolution of their worth owing to the scepticism that will arise."

T. RITCHIE RODGER.

The Ear

Parotitis Epidemica. A. LINCK. (*Archiv. für Ohren-, Nasen-, und Kehlkopfheilkunde*, Bd. 3, Heft 1, 1923.)

Linck contributes forty pages on mumps with special reference to the inner ear. Though the virus still eludes discovery and opportunities for histological study are rare, such of the pathology as is known, or can be inferred from clinical observations, provides the author with interesting data for discussion.

Does the inner ear become damaged by toxins or emboli, carried by blood vessels or lymphatics, or does the infection pass along the Eustachian tube? Epidemic parotitis must be regarded as a systemic infection, of which the invasion of the salivary glands is but a part. The specific otitis interna occurs at all ages and its severity is not dependent on that of the parotitis. It is generally unilateral; according to Schottenmüller the left side is more often affected than the right, and Voss opines that the subjects of previous aural disease are particularly susceptible. The general result is complete loss of function; fortunately, in those rare cases in which both ears are attacked, the second usually escapes more lightly. According to Mygind and other Continental and American authorities, mumps is responsible for only 0.3 per cent. to 0.5 per cent. of cases of deaf-mutism. Treatment is mainly prophylactic, but Linck considers the therapeutic and other aspects of epidemic parotitis in detail. A bibliography is appended.

WM. OLIVER LODGE.

Contribution to the Pathology of the Labyrinth. By J. S. FRASER, M.B., F.R.C.S. (Ed.). (*Annals of Otolaryngology, Rhinology, and Laryngology*, Vol. xxxii., December 1923, No. 4, p. 953.)

In a paper read before the American Laryngological, Rhinological, and Otolaryngological Society, Atlantic City, May 1923, Mr Fraser deals with the macroscopic and microscopic pathology of labyrinthine lesions.

It is a little difficult in a short abstract to deal adequately with the wealth of material and information so ably set forth. After a few introductory remarks proclaiming the necessity for further study of the labyrinth and explaining in detail the method of preparing the temporal bone for microscopic study, the writer sets forth his subject under the following headings: (1) Injuries—fractures; (2) War injuries of the ear; (3) Labyrinthine suppuration—serous and tuberculous; (4) Neuritis of the eighth nerve (Ménière's Syndrome); (5) Tumours of the eighth nerve. Cases illustrative of the two types of fractures met with are recorded. It is pointed out that the longitudinal fractures arising in the sella turcica and passing backwards through the middle ear-cleft to the external auditory canal do not involve the inner ear unless the fissure, on reaching the middle ear, is deflected through the

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petrous pyramid. On the other hand, transverse fractures are always associated with an injury to the labyrinth. Of 35 cases of tuberculous disease of the ear the labyrinth was found necrosed in whole or in part in 8 or 22 per cent. In addition, in 54 per cent. the outer labyrinthine wall showed pathological changes. The infection spreads to the inner ear, as a rule, by way of the oval or round window.

Fraser points out that the true Ménière's disease is still shrouded in confusion. Cases presenting Ménière's symptom, not apoplectiform in onset, frequently occur and are in all probability due to a toxic neuritis of the auditory nerve. The symptoms and microscopical findings of a case presenting Ménière's symptoms along with facial paralysis are described in detail. The paper is copiously illustrated with case records and an excellent series of micro-photographs.

F. H. DIGGLE.

The Effects of Unilateral Decerebration on the Vestibular Responses in Rabbits. Drs DUSSER DE BARENNE and A. DE KLEYN. (*Archiv. für Ophthalm.*, Vol. iii., Parts 3 and 4.)

This investigation was apparently undertaken in order to test the work of Bauer and Leidler (amongst others), published in 1911.

For this purpose the normal response to rotation and the caloric tests was first thoroughly established.

One side of the brain was then removed, and, after recovery, the response to these tests was again ascertained. Subsequently, a complete histological report of the cranial contents was made.

The results are summarised as follows:—

1. In normal rabbits one finds that there is a slight difference in the resulting nystagmus, after rotation to the right or left in most cases. In some cases this difference is considerable. The nystagmus may vary in intensity in the same animal after repeated rotation, or, after rotation on different days. In many cases an unequal effect is obtained, as the result of the caloric stimulus.

2. For these experiments, only those rabbits were used, in which either none of these variations occurred, or the variations were negligible.

3. After removal of one cerebral hemisphere—for instance the left—rotation produced the following results:—

(a) In some cases there was no obvious difference in the nystagmus after rotation, either to the right or the left.

(b) In some cases a definite discrepancy occurred, represented by a stronger nystagmus after rotation to the right than to the left.

(c) In other cases a very marked difference occurred—"nystagmus-delirium," following rotation to the right.

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4. The authors were unable to confirm the finding of Bauer and Leidler, based on similar experiments, that removal of one hemisphere induced a slight transient hyper-excitability of the homolateral and hypo-excitability of the contra-lateral vestibular apparatus.

Moreover, the authors found that in those cases which presented an asymmetry of nystagmus—after the performance of unilateral decerebration, and following equal stimulation of both labyrinths—a nystagmus with the quick component directed to the operated side was induced (irrespective of which side was stimulated), and this was much stronger than the nystagmus in the opposite direction.

Thus, the following results were obtained after removal of one cerebral hemisphere—for instance the left.

- (a) With simultaneous bilateral irrigation of both ears with cold or hot water, no nystagmus occurred.
- (b) The nystagmus after rotation to the right combined with irrigation of the right ear with cold water, and the left ear with hot water, was represented by a nystagmus with the quick component towards the left, which component was stronger than that occurring in the nystagmus, induced by the results of the stimulus being reversed.
- (c) For instance, in a rabbit, after left-sided labyrinthectomy, and after removal of the left cerebral hemisphere, the nystagmus after rotation to the right in some cases is stronger than after rotation to the left, in spite of the left labyrinthectomy.

5. As the result of these experiments, it follows that experimental data do not support the views of Bauer and Leidler, to the effect that spontaneous by-pointing in patients with disease of the frontal lobes can be due to the unequal excitability of the labyrinth as the result of lesions of the frontal lobe.

6. The more marked tendency for a nystagmus with its quick component directed towards the operated side (as reported under paragraph 4) cannot with certainty be ascribed, without further research, to the absence of the cerebral hemisphere of that side. Moreover, not only do the three cases reported under paragraph 3 indicate the contrary, but also the fact that in four experiments after bilateral extirpation of the cerebral hemispheres (as indeed appeared in the one similar experiment by Bauer and Leidler) no difference in the nystagmus to the right or left was discovered, although in two other cases, on one occasion a stronger nystagmus occurred after rotation to the right, and once, a stronger nystagmus after rotation to the left.

Of course extirpation of a cerebral hemisphere is almost always associated with unavoidable injury to adjacent remaining parts and to shock; which latter disturbances may be answerable for a particular

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tendency in the direction of the nystagmus. Careful microscopical research of the central nervous system might perhaps assist in the elucidation of these questions. ALEXANDER TWEEDIE.

THE NOSE.

The Comparative Anatomy of the Nose as a Guide to its Surgical and Medical Treatment. D. A. CROW, M.B., Ch.B. (*Practitioner*, March 1924.)

The sequence is traced from the more or less indefinite olfactory function possessed by the coelenterates, the definite olfactory organ of the fishes, the appearance of a communication between this and the lungs in amphibians, to the gradual differentiation, as we proceed upwards in the scale, into an upper olfactory and lower respiratory portion of the nose. The highest olfactory development is associated with the nocturnal habit, so markedly predominant in the cat, that the maxillo-turbinal or inferior turbinal which is typically a respiratory organ is actually overlapped by the ethmo-turbinals, and "deep to this system of ecto-ethmo-turbinals is another series of endo-ethmoids actually invading the air-sinuses and exhibiting a lavishness of growth superficially reminiscent of a pathological neoplasm, the idea being to enlarge the surface receiving olfactory sensation." The author thinks a cat's dreams are likely to be as exclusively olfactory as ours are visual.

The Jacobson organ, a bilateral canal in the lower part of the septum, containing olfactory as well as ciliated epithelium is well illustrated in the sheep, and is probably an accessory olfactory organ connected in some way with the herd-sense. When we reach the kangaroo we have passed the highest development of the olfactory sense. From that point upward the respiratory function increases at the expense of the other.

In the human nose only the superior turbinal, "an area no larger than a postage stamp," and a corresponding area on the septum, are concerned with the sense of smell. The remainder of the nose is lined with ciliated columnar epithelium. Paulsen's experiments are referred to as showing that on inspiration the air takes a curved course, hardly rising as high as the middle of the middle turbinal, and on expiration passing somewhat lower.

Between the olfactory and respiratory areas there is thus left a part concerned in neither function, and, as often happens with residual organs elsewhere, this area is important in its pathological tendencies. Here the accessory sinuses communicate with the nose, and as these were formally in all probability olfactory in function, their present non-functioning renders them more vulnerable to disease, if nasal catarrh is determined by such conditions as adenoids or septal deformities. These last named conditions interfere with a free passage of the air

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currents and a free flow of mucus. Thus catarrh is established with hypertrophy of the mucous glands and loss of ciliated epithelium, so that while more mucus is produced, the means of getting rid of it are less and a vicious circle is set up. The question of curing catarrh by operation turns on the condition of the mucosa. Ciliated epithelium can never be regenerated. The author pleads that the nasal mucosa should be treated as delicately as the ophthalmic surgeon treats the conjunctiva, and that patients should be taught to live more naturally.

T. RITCHIE RODGER.

A New Method of Grafting in Plastic Surgery of the Nose.
J. TARNEAUD and J. TERRACOL. (*Revue de Laryngologie*, 30th November 1923.)

This article records a case of plastic operation to restore the patency of collapsed alæ nasi, by means of stiffening the collapsed tissues by buried grafts introduced through longitudinal incisions along the lower border of the alæ. For so small an operation the method of autogenous cartilage grafting is perhaps rather an unduly severe procedure. The authors used a piece of tendon from an ox's foot, previously removed aseptically, and preserved in alcohol. The graft was well tolerated, and the patency of the nose was restored as the result of the operation.

G. WILKINSON.

Recurrent Nasal Polypus in Adolescents. G. CANUYT and J. TERRACOL.
(*Archives Internationales des Laryngologie*, February 1924.)

These authors discuss a particular variety of nasal polyposis, namely, that occurring in young subjects. It recurs again and again on removal and deforms the bony nasal walls.

They describe a typical case and analyse in detail the principal features of this condition. They are in agreement with Woakes in ascribing the pathological changes to a "necrosing ethmoiditis." Stress is laid on the fact that in this particular form of polyposis there is compensatory thickening of the nasal and maxillary bone, as opposed to the deformity of the cartilaginous and soft parts occurring in extensive polyposis of the commoner adult variety.

They believe that this disease is a manifestation of congenital syphilis.

M. VLASTO.

A Surgical Treatment of Ozæna. S. M. BOURAK. (*Archiv. Internat. de Laryng.*, January 1924.)

Reviewing the work done more especially in Germany during the last five years on this particular subject, the author points out both the difficulty in executing most of these operations (*e.g.* Wittmaack, Lautenschläger, etc.), the troublesome after-treatment, and the uncertainty of obtaining satisfactory uniform results.

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The writer has chosen fat as opposed to other substances, *e.g.* rubber, cartilage, bone, paraffin, because he finds these uncertain in their results and sometimes extruded later. Fat, he considers, has greater vitality, is more workable, and can be obtained from the patient's abdomen, shoulder, etc., if necessary, even under a local anæsthetic with greater ease than either cartilage or bone.

The operation consists in exposing the anterior nares through a gingivo-labial incision, reflecting the soft parts (mucoperiosteum) from the floor and lateral wall of the nasal cavity above and below the inferior turbinate as high and as far back as possible. Removal of the inferior turbinate from its crest with rugine is carried out. Medial transplantation of this wall of mucoperiosteum, and the filling of the cavity that is left with the necessary amount of fat completes the operation. Healing occurs by first intention in five or six days, and is free from complications apart from slight œdema of the cheek.

J. B. CAVENAGH.

Control of Pain of Herpes Zoster of Ophthalmic Nerve through Meckel's Ganglion and Sphenoidal Sinus. Dr W. M. C. BRYAN. (*The Laryngoscope*, September 1923.)

The author describes a case of herpes of the ophthalmic division and part of the maxillary division of the fifth nerve in which the pain was so severe that the patient was confined to bed.

As there was a good deal of nasal congestion, treatment was directed to the nose, and it was found on applying cocain, that, as soon as the region of Meckel's ganglion was reached, the severe pain in the eye at once disappeared.

As, however, pain still remained in the region supplied by the supra-orbital and frontal branches, an attempt was made to control this by applying cocain to the lateral wall of the sphenoidal sinus of that side, *viâ* the natural ostium. This was found to be entirely successful.

There only remained some pain in the facial and zygomatic branches of the fifth, which resisted all efforts to remove by means of "blocking."

J. B. CAVENAGH.

PERORAL ENDOSCOPY.

Essential Points in Technique of Broncho-œsophagoscopy. Dr J. GUISEZ, Paris. (*Bulletin d'Oto-Rhino-Laryngologie*, January 1924.)

The author describes the specially important points of this "specialty within a specialty" based on his own observations during twenty years. He emphasises the importance of frequent practice with the most modern equipment, if uniformly good results are desired.

Peroral Endoscopy

Brünings' lighting system is condemned; the Clar forehead mirror is the best, and should have a focus of 40 cm. The tube is polished on the inside. Distal lighting may be used—it has the disadvantage that mucus, blood, pus, etc., may obscure the light. The shortest and widest tube possible should be used. Too narrow a tube affords the chance of over-riding a foreign body and so perhaps causing perforation. Oval tubes can be used in the œsophagus with advantage, up to a maximum width of 18 mm. Especially in bronchoscopy is the proper choice of a tube important; it must pass through the larynx and trachea *with ease*. In the young, a removable laryngeal spatula is of great assistance in passing the tube. Should one use an obturator in passing the œsophagoscopic tube? This proceeding facilitates in many cases, and is permissible when approaching a stricture—not a foreign body—of which the exact site is known: it is contrary to the fundamental rule that every manipulation is to be performed under direct vision. The obturator must be of soft rubber, not of metal.

Preparation of Patient.—Whenever it is at all possible, the patient should receive liquid food only, for at least forty-eight hours before examination. If feeding is difficult, a gastrostomy should be done. Except in foreign body cases, a soft olivary bougie should be passed before deciding on an œsophagoscopy.

Skiagrams should invariably be taken before the examination. Small bones, fish bones, etc., will not reveal themselves by skiagraphy. The exposure should be made, for foreign bodies, as short a time as possible before the examination; such bodies may pass up or down, or from one bronchus into the other.

Anæsthesia.—An injection of morphine should be given. Almost all cases in adults can be and should be dealt with under local anæsthesia. In children, ethyl chloride, and if necessary ether, should be used. Infants under two years do not need an anæsthetic, nor should one ever be used. If chloroform is used, nothing must be attempted until full anæsthesia has been induced.

Position of Patient.—In a few cases, a sitting position is of use. For nearly all, the author prefers a supine position, with extended head. He avoids Rose's position; advising a slight hyper-extension of the head only. The assistant should control the patient's head.

Contra-indications.—Age holds none. Subglottic trauma in the very young must be avoided—inferior bronchoscopy may be better than superior with these patients.

In conclusion, when difficulties arise the greatest care, gentleness, and patience are called for. If success is not attained at the first attempt, an interval of several days should be allowed before another is made. (A number of woodcuts adorn but do not invariably elucidate the text.)

E. WATSON-WILLIAMS.

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The Importance of Radioscopic Examination in Cases of Foreign Bodies in the Bronchi. TEXIER and LEVESQUE. (*Annales des Maladies de l'Oreille*, December 1924.)

X-ray examination is useful in these cases, even if the foreign body is not visible on the screen. Signs of obstruction of one bronchus may be present. This is revealed by: 1. Displacement of mediastinal organs, which may be permanent, or may only accompany inspiration. 2. Diminution of the amplitude of the movements of the diaphragm of one side. 3. Modification of the transparency of one side.

If the stenosis of the bronchus is complete, the displacement of the mediastinum will take place rapidly; if incomplete, displacement is less marked, and takes place only in inspiration. Lessening in the amount of the diaphragmatic movements is governed by the amount of obstruction, as is also the amount of collapse of the lung.

The case is quoted of a child of two years, thirty-six hours after inhaling a piece of roasted chestnut, who showed dyspnoea (without cyanosis), expiratory stridor, slight in-pulling at the right lower ribs, respirations of 60 per minute, and râles all over the chest, though worse on right side. The skiagram revealed no abnormal opacity, inspiratory deviation of the mediastinum to the right, and very marked diminution of the diaphragmatic movements on the right side. No foreign body was visible. The chestnut was recovered without untoward results.

GAVIN YOUNG.

Three Remarkable Foreign Bodies in the Gullet. C. v. EICKEN, Berlin. (*Zeitschr. f. Hals-, Nasen-, und Ohrenheilk.*, February 1923, Bd. 4, Heft 2.)

CASE I.—A woman of 24 years swallowed a piece of bone which stuck in her throat. She came to the hospital next day and the X-ray showed a small shadow 2.8 cm. below the ventricle of Morgagni. Œsophagoscopy in the left lateral position showed a large mass in the entrance of the œsophagus. When grasped with forceps a piece became detached and the main mass immediately slipped down into the œsophagus, whence it was easily extracted with a tube. However, the mass contained no bone, but as the patient could swallow better it was thought that the bone must have slipped down. Patient returned next day with the same pain. Œsophagoscopy from the left sinus pyriformis down to the stomach showed no bone, but on removing the tube the bone was finally seen in the right sinus and removed. The bone measured 2.7 by 0.6 by 0.3 cm.

CASE II.—This case was very similar to Case I. in that the piece of bone was discovered in the right pyriform fossa during withdrawal of the tube.

Peroral Endoscopy

CASE III.—This case is probably unique. A woman came to the clinic having swallowed an upper denture the night before. The plate was seen in the skiagram at the level of the first to the third thoracic vertebrae, that is, several centimeters below the mouth of the œsophagus. One of the junior assistants attempted to extract the foreign body with a Brünings' claw forceps. However, there was considerable resistance on attempting to pull upwards, and as any forcible manipulations are strictly forbidden the chief was asked for assistance. It was found that the F.B. was gripped at its lower end, and when traction was made it moved slightly out of its place but immediately sank back to its original position. It was also discovered that the forceps could not be disengaged even on opening to their widest extent, and the patient was now in the unfortunate position of having three foreign bodies instead of one, namely, the forceps and tube in addition to the tooth plate. Another pair of forceps was introduced but would not grip. A stronger pair was next tried, but this left so little space in the tube that there was no room to see down.

The Brünings' forceps were next taken apart by nipping off the small nob on the end of the central wire, and the outer part could then be slipped out. This enabled the operator to remove the œsophagoscope and substitute one with a much larger bore. Strong grasping forceps were inserted and the plate was easily extracted along with the half of the Brünings' forceps. It was then found that the jaws of the forceps were open to their widest extent and the hooks had become locked with the indentations of the tooth-plate. The author comments that a more experienced endoscopist would probably have gripped the foreign body by its proximal instead of its distal end.

J. K. MILNE-DICKIE.

Primary Sarcoma of the Œsophagus. CURTIS E. SMITH, M.D., and G. Y. RUSK, M.D. (*Annals of Surgery*, November 1923.)

The apparent rarity of this affection may be due to lack of careful histological examination of œsophageal tumours.

Including the author's case (a polypoid, spindle cell fibrosarcoma) 35 have been reported. Average age, 53.6 years; they are much more common in men. Pain was present in many cases, and dysphagia due to stenosis in almost all. With regard to the site, 24 were in the lower half of the œsophagus, 8 in the upper half, 2 involved middle and lower parts, 1 the middle third. In 14 cases the growth was polypoid, in 12 nodular and diffuse, in 9 annular. Many in the last two groups showed ulceration. The growths seem to originate in the submucosa, except in myosarcomata. Type of cells: 11 were spindle cell, 7 mixed spindle and round cell, 5 round cell, 5

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myosarcomata, 2 melanosarcomata, 1 lymphosarcoma, 1 lymphangio-endothelioma, 1 endothelial sarcoma, 1 carcinoma-sarcomatodes. In one the type of cell was not given.

Seventeen of the cases did not show metastases. In most of the others adjacent nodes only were involved. Extensive metastasis occurred in some.

In 7 the tumour perforated the oesophagus with sinuses to trachea, bronchi, and lungs.

It is thought that operation might affect a cure in slow growing fibrosarcomata when discovered early. Gastrostomy is often necessary. Resection of the oesophagus was done in only one case. Recurrence and death took place in three months. N. M. RANKIN.

MISCELLANEOUS.

The Treatment of Asthma with Combined Peptone and Vaccine. JOHN VEITCH, M.B., Ch.B. (*Brit. Med. Journ.*, 5th January 1924.)

This is a record of 24 cases treated by injections of peptone and vaccine in one solution. The injections were given weekly in increasing strength and 14 cases are claimed as cures while, of the others, only one showed no improvement. The results were best in younger patients—the age of the patient was of more importance than the duration of the condition. T. RITCHIE RODGER.

A Theory of Asthma. Prof. W. STORM VAN LEEUWEN, Leyden. (*Brit. Med. Journ.*, 22nd March 1924.)

In this paper, read before the section of Therapeutics and Pharmacology of the Royal Society of Medicine, the author refers to the fact that in one area investigated by himself many asthmatic patients lived close to stores of grain infected by mites. A box of the grain was sent to a patient in Switzerland who had gone there—with success—to escape from his asthma. At once the asthma returned. All attempts to discover the identity of the substance had so far proved unavailing. It was not limited to Holland but had been noticed in North Germany and elsewhere.

The author's treatment consists in tuberculin injection.

T. RITCHIE RODGER.

Citelli's Auto-vaccine in the Treatment of Sarcoma. Prof. CALICETI. (*Revue de Laryngologie*, 30th September 1923.)

The treatment consists of injecting into the patient gradually increasing doses of watery extract of pieces of the tumour of which he is the host. It is stated that apparent cure has been obtained

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in 10 cases by this method (Citelli 5, Caliceti 3, Gradenigo 1, Caldera 1), and that arrest of the growth, or temporary disappearance has occurred in a number of others.

The theoretical basis of the treatment rests on the assumption that (1) the tumours are due to blastomycetic infection; (2) that the tissues can be stimulated to the production of antibodies in sufficient quantity by the injection of toxins obtained from the growth. Presumably the amount of toxin absorbed from the growth is ordinarily insufficient for the production of immunisation.

In the discussion following Prof. Caliceti's paper more or less favourable results were attested by Caldera, Brunetti, Borgheggiani, and Bronzini. On the other hand unfavourable, or indeed disastrous cases reported by Gavello and Bruzzi emphasised the very real risk of grave septic infection following the injection of the serum, in the preparation of which the method of sterilisation employed (trituration of the material removed from the tumour with 0.5 per cent. phenol) appears to be of very doubtful efficiency. As the material used in the majority of cases was taken from open tumours of the upper respiratory passages, the occurrence of such septic infections is scarcely surprising.

G. WILKINSON.

Swimming-bath Infections. J. J. HINMAN, jun. (*University of Iowa Studies*, First Series, No. 57, 1st February 1922.)

The danger of infection of the ears and upper air passages, and especially of the nasal sinuses from the water of swimming-baths is well recognised by otologists and rhinologists. Even the sea water of our seaside bathing resorts is not above reproach, as Wyatt Wingrave found *Bacillus coli* in all the specimens examined by him.

The writer of the paper tabulates the infections which have been attributed to contaminated swimming pools and streams as follows:—

- (1) Intestinal infections, such as typhoid, dysentery, etc.
- (2) Infections of the respiratory system, as grippe, colds, sore throats, and sinus infections.
- (3) Eye and ear infections, such as conjunctivitis, rhinitis, and ethmoiditis.
- (4) Gonorrhœal infections.
- (5) Skin infections.

As the result of a number of experiments on the most effectual method of purifying bath water, the writer formulates the following conclusions:—

The number of infections due to swimming pools is possibly overestimated, but the fact remains that unless such pools are kept in proper condition, they may be dangerous to the public health.

Abstracts

Strict supervision of bathers, to exclude those suffering from infections, and to insure sufficient degree of cleanliness is essential.

Refiltration of the pool water is economical and renders the water more attractive. It is not possible to purify the water satisfactorily without the use of germicides.

It is advisable that the purifying plant be of sufficient capacity to dilute the contaminated pool water rapidly with fresh purified water. This lowers the concentration of infective matter.

The simplest, and on the whole the most effectual method of disinfection was found to be to place two bags in the pool, one containing copper sulphate, and the other calcium hypochlorite, and to drag these through the water by means of cords at regular intervals. There should not be sufficient concentration of the chlorine solution to cause any noticeable smell of chlorine. There is no danger of the copper solution reaching such a concentration as to be dangerous if swallowed.

G. WILKINSON.

The Administration of Hypertonic Salt Solutions for the Relief of Intracranial Pressure. TEMPLE FAY, M.D., Philadelphia. (*Journ. Amer. Med. Assoc.*, Vol. lxxx., No. 20, 19th May 1923.)

The use of magnesium sulphate in controlling intracranial tension is discussed and good results are claimed. A number of intracranial tumours and brain abscesses, both supra- and infra-tentorial, were benefited by the use of this drug. The pressure symptoms of vomiting, headache, and œdema of optic discs were relieved, the pulse and respirations also increased. It is used as a preoperative measure to diminish risk in opening of the dura mater when tension is much increased, and following operation to relieve excessive pressure.

The drug produces its action by rapid dehydration of blood plasma solely through the intestinal walls, with compensatory absorption on the part of the blood from the fluid spaces, especially the ventricular system, in order to obtain normal blood volume. No ill effects from repeated use have been noted.

Further application of this treatment was found of benefit in a case of Ludwig's angina in which a tracheotomy seemed imminent.

The author further discusses the use of hypertonic salt solution for more immediate results, but does not consider it of the same value as magnesium sulphate given as above described.

"Magnesium sulphate is best given by the rectum." Three oz. of the crystals dissolved in 6 oz. of warm water are introduced per rectum by a soft rubber catheter and syringe. The effects are produced within an hour, and the dose may be repeated in four hours and until the desired effect is produced. Intake of fluids should of course be restricted. If given by mouth the dose should be reduced by one half.

PERRY GOLDSMITH.