ABSTRACTS

THE EAR.

Repair of the Tympanic Membrane. R. GOMPERZ. (*Zentralblatt für Hals-, Nasen-, und Ohrenheilkunde*, 1925, Vol. viii., pp. 52-54.)

This is an abstract of four papers by Gomperz appearing in the *Wiener. Med. Wochenschr.* for 1925. The author points out that, in spite of the great tendency to regeneration of the membrane after perforation, there are many cases of failure. He agrees with Politzer and Habermann that this is due to the overgrowth of the outer layer of epithelium over the edges of the unhealed perforation.

In the first year of life, in spite of the great frequency of acute otitis media, unhealed perforations are rare except in tuberculous or syphilitic subjects. The commonest causes of perforation at this period are influenza, whooping cough, measles, and diphtheria. The largest perforations are those following scarlet fever in childhood, more rarely, measles, tubercle, or typhus.

With continued suppuration and deterioration of the general health the perforation enlarges, but Gomperz has observed old perforations close after a fresh attack of acute middle-ear inflammation.

Deafness varies according to the size and position of the perforation, and is most marked when there is some additional interference, such as deformation of the membrane, calcareous deposits, etc. As a rule hearing improves with the cessation of suppuration. For small perforations Gomperz advises inflation and drum-massage. For larger perforations the best result is obtained by stimulating the repair of the membrane, failing that, by an artificial drum.

To achieve cicatrisation Gomperz advises the application of trichloracetic acid to the edges of the perforation. This will sometimes cut short a chronic middle-ear suppuration. The treatment must be carried out over a long period (five to six weeks). The cicatrisation is usually concentric. Occasionally a change of irritant is useful, the author uses liquor ferri perchlor., or a plug of cotton-wool soaked in 2 per cent. silver nitrate and left in for eight days. He claims success, with improvement of hearing, in 50 per cent. of his cases. If the edges of the perforation are adherent to the inner tympanic wall he divides the synechiæ before starting treatment. He regards the method as unsuitable in cases of attic suppuration, as there is little impairment of hearing from an attic perforation and there is danger of causing retention of pus by closing it.

He has seen no good results from attempts at a plastic repair (turning in an epithelial flap or closing the perforation with egg

membrane) but speaks favourably of artificial drums, which he describes in detail. Where secretion persists no form of rigid prosthesis (rubber discs, etc.) should be used; here powders, *e.g.* dermatol, are useful, also cotton-wool soaked in sterile glycerine or mentholised vaseline. A suppurating cavity does not stand any form of prosthesis well. For a completely non-irritating body he uses sterile paraffin of a high melting point forced in with a syringe of the type used for paraffin injections.

For dry perforations Gomperz speaks favourably of collodion and glycerine, and of photoxylin (10 per cent. solution) painted over the edges. Of all forms of prosthesis he prefers a disc of silver-foil, which he finds absolutely non-irritating to the mucosa.

He suggests that, in doing a radical mastoid operation, the facial spur should not be removed too freely so that an artificial drum can be better retained. F. W. WATKYN-THOMAS.

On the Effect of Ligature of the Jugular Vein in Experimental Sinus Thrombosis. W. UNDRITZ, Leningrad. (*Zeitschrift für Hals-, Nasen-, und Ohrenheilk.*, Vol. xiii., Part 2, p. 204.)

Without attaching extreme importance to statistics, the results in 61 cases published by Grünberg show that in 20 ligature was carried out with 15 per cent. of recoveries, and in 41 it was omitted with 60 per cent. recoveries. There is no doubt that the ligature was often relegated to the most severe cases as a last resort, but in any case the 60 per cent. recoveries without ligature are very impressive.

The results of experiments on animals are not quite analogous to those of disease in the human subject, but they are certainly very instructive. Undritz experimented upon dogs and he selected the transverse sinus corresponding to the human lateral sinus; where the ligature was carried out it was applied both to the external as well as to the internal jugular veins. On account of its impossibility in the dog the sinus was exposed without being opened, and on its surface was placed a tampon moistened with a culture of bacilli. After the ligature there was a tendency for the thrombus to extend down to the vertebral vein. The results in 22 cases were that in the 11 without ligature 5 died and 6 recovered, and in the 11 with ligature there were also 5 deaths and 6 recoveries.

The action of the bacteria and the toxins was of three types: (1) The sinus wall became necrotic without thrombus having formed; this was the most severe type; (2) the sinus wall was thickened and a white thrombus formed with little tendency to suppuration and soon underwent organisation; these were the mildest cases; (3) the sinus wall was infiltrated by cells and there was a tendency to purulent breakdown; a red thrombus formed and usually suppurated, though

more rarely it organised. The difference depended on the varieties and the virulence of the micro-organisms. Undritz looks upon the thrombus as a protection which only in exceptional circumstances becomes injurious. In the human subject thrombosis in the course of acute otitis media is the most nearly analogous. The activity of the intervention depends upon the severity of the general symptoms rather than the presence of a thrombus, the firm and adherent parts of the thrombus being most carefully preserved. In chronic cases it is of great importance to operate as early as possible, but it is often useless to ligature the jugular as it brings about a reversal of the current, and other routes remain open for the infective material. The diminution of the percentage of mortality after sinus thrombosis depends chiefly on early diagnosis and perfection in the methods of recognising it. The author considers that ligature is in most cases superfluous and must only be carried out when the purulent inflammation has already reached the jugular vein or, above all, when the bulb has to be drained from below.

JAMES DUNDAS-GRANT.

Dynamic Studies on the Cerebro-spinal Fluid in the Differential Diagnosis of Lateral Sinus Thrombosis. Drs G. L. TOBEY and J. B. AYER, Boston, U.S.A. (*Archives of Oto-Laryngology*, Vol. ii., No 1.)

The authors have made use of the positive Quickenstedt sign as an aid to the diagnosis of lateral sinus thrombosis.

They conclude that when obstruction of the lateral sinus, jugular bulb, or internal jugular vein occurs, it may be demonstrated by manometric readings of the cerebro-spinal fluid on lumbar puncture. The absence of this sign is of great value in the differential diagnosis of sinus thrombosis.

H. W. D. M'CART.

Two Cases of Cerebellar Abscess Operated upon by the Method of Lemaître. ROBERT LUND. (*Archives Internationales de Laryngologie*, February 1926.)

A case of bilateral mastoiditis is recorded in which the lateral sinus of one side was thrombosed. Although the sinus was recognised as being thrombosed at the time of the operation, the author did not open it because there were no signs of a general systemic infection.

The subsequent behaviour of the case has convinced him that a thrombosed sinus should always be opened to ascertain if softening of the clot has occurred. If the clot is entirely solid, he advises leaving it undisturbed.

One month after the first operation, a cerebellar abscess was opened through the exposed lateral sinus. The abscess was drained after the method of Lemaître.

The method consists in first localising the abscess with a wide-bore

needle attached to a syringe, and then draining the abscess through the puncture route with a filiform rubber drain. The pus finds its way out slowly by the side of the drain and the fistula becomes shut off by protective granulations and adhesions. The bore of the drain is increased daily until the abscess cavity is filled in.

The three great advantages of the Lemaître method are as follows:—

(1) Drainage is facilitated by the relative tough character of the narrow path of drainage.

(2) The subarachnoid space is shut off by adhesions, and infection of this space is avoided.

(3) Prolapsus cerebri does not occur.

MICHAEL VLASTO.

THE NOSE.

The Nasal Vasomotor Reflex Phenomenon and its Clinical Significance. O. MUCK, Essen. (*Zeitschrift für Hals-, Nasen-, und Ohrenheilkunde*, Band xiii., Heft 3, p. 311.)

The nasal mucous membrane is lightly sprayed with an adrenalin solution, 1 in 1000, so that after a few seconds a slight pallor has set in. If then at the same place it is stroked under moderate pressure with a probe, there follows a linear or patchy redness which is a vasodilator reflex and which disappears in the course of from one to fifteen minutes. This occurs in normal persons, but in certain diseased conditions and in many women during pregnancy there appears a distinct white streak fairly sharply limited which continues for a few minutes after the disappearance of the adrenalin pallor. This white streak indicates a renewed vasocontraction of the adrenalised mucous membrane. Muck found this occurrence in sympatheticotonic hemicrania and in epilepsy and pregnancy, also in certain cases of Ménière's symptoms, when it indicates that the labyrinthine disturbance is of an angio-neurotic character. In regard to the last he gives the instruction that before this diagnosis is academically accepted the Wassermann reaction of the cerebro-spinal fluid must be tested, as he found as a rule the white streaking well marked in the late stages of syphilis. Another condition in which the white streaking occurs is in injuries to the skull. In the presence of this vasomotor reflex, when the other conditions mentioned have been excluded, syphilis should be suspected.

JAMES DUNDAS-GRANT.

Vaccine Treatment of Ozæna. Drs REBATTU and PROBY. (*Bulletin d'Oto-Rhino-Laryngologie*, Paris, March 1926.)

The authors have tried ordinary methods of vaccine treatment for ozæna with poly-microbian stock vaccine, using heroic doses; but without notable success. They do not believe that any one infection can be held responsible for atrophic rhinitis, which phrase is used

throughout as interchangeable with "ozæna." They have been led to try local treatment by autogenous vaccines; preparations containing 2 or 4 thousand millions of organisms per c.c. were sprayed on to the nasal mucosa. By this method, seven successes were obtained with eight patients. It is not necessary to scarify the turbinals before application, nor is it advisable to inject the vaccine submucously. The authors consider that pansinusitis is present in all cases of atrophic rhinitis; they therefore utilise the antrum as a depot into which to inject vaccine, so that the nose may be subjected to a constant influence. Four patients were treated in this way, 8 or 9 injections being made into each antrum, and the improvement was gratifying.

E. WATSON-WILLIAMS.

THE PHARYNX.

Mucous Glands in the Tonsillar Fossa. Dr H. NEUMANN. (*Proceedings of Vienna Laryngological and Rhinological Society*, 1st December 1925.)

The patient was a woman, aged 26, on whom Neumann had operated under a local anæsthetic on account of recurrent attacks of pharyngitis. Both tonsils were easily enucleated together with the capsule completely intact and without any tear in the latter.

In re-examining the wound on account of some subsequent hæmorrhage, he found in the upper angle of the tonsillar fossa on the right side, some glandular tissue, which at first he thought to be tonsillar tissue; but on further examination he was able to determine that this tissue reached up between the two folds of the velum to the hard palate. In order, therefore, completely to remove this tissue he had to make a vertical incision in the anterior pillar of the fauces.

On removal, the structure had the appearance and size of a small plum; and, on histological examination, was found to consist of typical mucous glandular tissue without any sign of inflammatory condition, as could be seen in the preparation which he also showed.

The condition appeared to him of importance, as possibly offering the explanation of the development of peri-tonsillar abscesses which may develop after complete tonsillectomy.

He could not say if such aberrant mucous glands were a common occurrence, nor had he been able to find any reference to the same in literature. Obviously, however, with his experience, the possibility of their presence must now be recognised. A. R. TWEEDIE.

On Agranulocytotic Angina. U. FRIEDEMANN (Berlin). (*Zeitschrift für Hals-, Nasen-, und Ohrenheilkunde*, Band xiii., No. 3, p. 473.)

The writer, as a general physician, draws attention to certain forms of pharyngeal and tonsillar ulceration which depend upon or, at least,

are associated with pathological conditions in the blood. He describes a case of severe necrotic and gangrenous process in the tonsils simulating diphtheria, but not answering to large doses of antitoxin. Examination of the blood showed diminution in the number of red cells; the blood platelets numbered 220,000, the diminution in the white corpuscles being very striking. The differential count showed the absence of polymorphonuclear leucocytes; death followed in eight days. The prognosis in this angina agranulocytotica is extremely unfavourable and the only treatment which Friedemann found of any avail was blood transfusion. In a case described by Türck staphylococci were found in the blood and death took place in five or six days, but this infection was probably superadded to the original blood disease. The necrosis is probably due to the low red immunity of the tissues which again may depend upon the deficiency of leucocytes. Other forms of anæmia may be accompanied by similar processes in the tonsils. In myeloblastic leukæmia there is a great diminution in platelets and the clinical features are extreme anæmia and hæmophilia which is not found in the agranulocytotic form. In lymphatic leukæmia the blood picture is similar. In the aleukia described by Frank there is a want of platelets as well as of white and red corpuscles. There is also a monocytotic angina; in this the tonsillitis has more of a follicular character with a superficial greenish-grey exudation; the tonsils may be much enlarged so that the pharynx may be almost closed and respiration rendered difficult. The prognosis, however, is fairly favourable, although the disease may last for three or four weeks with high fever. The blood picture shows a slight increase of the total number of corpuscles, but there are about 80 per cent. of large mononuclear cells. These new aspects of angina indicate the importance of an examination of the blood in every obscure case. JAMES DUNDAS-GRANT.

Syndrome of Avellis. Dr C. J. IMPERATORI, New York. (*Archives of Oto-Laryngology*, March 1925, Vol. i., No. 3, pp. 277-282.)

Imperatori reports three cases of the above syndrome. The diagnosis was based on the following: (1) Ipsolateral paralysis of the soft palate, partial paralysis of the constrictors of the pharynx, paralysis of the vocal cord, and partial paralysis of the œsophagus; (2) Contralateral loss of pain and temperature of half of the body below the interauricular line; (3) Chronic endarteritis; (4) Absence of all other motor and sensory disturbances.

The three cases were women past middle life, with a high blood pressure over a number of years. Most of the symptoms disappeared after three to twelve weeks. H. W. D. M'CART.

Peroral Endoscopy

PERORAL ENDOSCOPY.

A Case of Urticaria of the Trachea. Dr WOLFF FREUDENTHAL. (*Laryngoscope*, Vol. xxxiv., p. 116.)

More than twenty years ago the writer reported a case of urticaria of the larynx in a man aged 59 who complained of vague symptoms in his throat. A diffuse redness of the laryngeal surface of the epiglottis and a slightly œdematous elevation on its right side were observed. Treatment had little effect and it was only many years later, on discovering that the patient suffered from a general urticaria, that the true pathology was suspected. When he was free from urticaria, the throat condition also cleared up. He died at the age of 75, and the writer had ample opportunity of verifying the diagnosis.

The present case was that of a lady of 40 who was an opera singer, and had an attack of influenza with considerable depression following. Some time after she became hoarse, and physicians declared it to be rheumatic. This was followed by meningism and all the joints became swollen. A month later she was well. Over a year later the same trouble recurred, and was eventually diagnosed as tuberculosis of the larynx. The tonsils were removed by someone else, and she passed through various hands till she consulted the writer two and a half years after the origin of the trouble. Her main complaint was that her nose and throat were terribly dry. On examination there was a rhinitis sicca and a mass of granulation tissue on the right side of the pharyngeal wall. The right vocal cord was thickened. She obtained relief after injections of orthoform-menthol emulsion into the trachea. Later the granuloma broke down and the condition was thought to be specific so two injections of neo-salvarsan were given. A severe urticaria followed, spreading over the body and face. It dawned on the writer that the suspected granuloma was a pharyngeal manifestation of an urticaria, in other words, a wheal which preceded or followed the cutaneous eruptions. In fact after the urticaria subsided, the wheal reappeared apparently more extensive than ever and the trachea became more irritable. Repeated bronchoscopies revealed a whitish elevation on the posterior wall of the trachea an inch and a half from the glottis. It was undoubtedly a wheal or an urticaria of the trachea. The patient's father had been a martyr to urticaria and died of the disease. ANDREW CAMPBELL.

Carcinomatous Bronchial Stenosis with Inspiratory Enlargement of the Cervical Veins. W. NONNENBRUCH. (*Münch. Med. Wochenschrift*, S. 564, Nr. 14, Jahr. 73.)

The tumour was occupying the left bronchus as shown by radiographic and physical signs, yet it was accompanied by *inspiratory*

dilatation of the cervical veins on the right side. The author concludes that this resulted from constriction of the right innominate vein secondary to the movement of the mediastinum towards the diseased left side, a sequence of events not previously recorded.

J. B. HORGAN.

Systemic Complications in Cases of Foreign Body in the Bronchi of Children. Dr ELLEN J. PATTERSON. (*Laryngoscope*, Vol. xxxiv., p. 86.)

Pyelitis occurs frequently in children in two forms. (1) The so-called primary form. (2) The secondary form, as a complication of other diseases, the latter being more frequent.

The three chief theories as to the manner of infection are (1) ascending infection through the ureter; (2) lymphogenous transmission; and (3) hæmatogenous infection.

CASE I.—A female, aged 4 years, aspirated a bead which after one or two unsuccessful efforts of removal through the bronchoscope, was eventually removed. In the intervals of bronchoscopy, symptoms suggestive of pyelitis were observed and the diagnosis was confirmed. After removal of the foreign body the pyelitis cleared up.

CASE II.—Female, aged 4 years, aspirated a carpet tack, and on the first examination with the bronchoscope, there was an intense tracheo-bronchitis with much pus. The child was very apathetic; urine showed pus cells. At a second bronchoscopy the tack was removed. The urine became normal in five days.

CASE III.—Female, aged 14 months, also with a tack in the left bronchus: owing to granulations and pus, the first attempt at removal was not successful. Twenty-four hours after, a tracheotomy was done to relieve dyspnœa due to thick secretions. Even after this the child's life was in danger owing to the thick tenacious secretion. The administration of syrupus ferri iodidi, three drops every three hours, thinned the secretions so that they were easily coughed out through the tracheotomy tube. Owing to the enfeebled condition of the child the tack was not removed until the fourth attempt. In babies whose lives are endangered by asphyxiation from thick secretions, the consistency of the secretion can be controlled by iodides, and it is suggested that sodium iodide would be less irritating to babies.

ANDREW CAMPBELL.

The Peanut Problem—A Case Report and a Suggestion. Dr J. W. JERVEY. (*Laryngoscope*, Vol. xxxiv., p. 112.)

A little girl, aged 2 years, was suddenly seized with severe coughing and choking after playing with a parched peanut. She became markedly cyanotic and appeared to be *in extremis*. With a direct Jackson speculum, a good view was obtained and the foreign body was seen to

be impacted just above the bifurcation and almost completely filling the trachea. The bronchoscope was passed and the foreign body was recognised as the kernel of the nut. Owing to the possibility of breaking up the foreign body by attempts to remove it, the author performed a tracheotomy of generous proportions. As the knife entered the trachea, an explosive cough occurred, and the foreign body was forced upward to the subglottic area above the tracheotomy wound. It was removed with the aid of a spoon curette, in two parts. Large quantities of purulent secretion were immediately expelled and respiration became easy.

Bronchoscopy now revealed that the trachea was so narrowed that the tube could not be passed below the site of impaction. The tracheal wound was kept widely patulous with retaining sutures on each side, tied together at the back of the neck. No tracheotomy tube was inserted and a gauze covering was applied. Very large quantities of purulent secretion were coughed up and it was found necessary to employ suction to get rid of the secretions. Apparently the child had a severe broncho-pneumonia. In a few days the trachea was allowed to heal by granulation, the soft tissues being kept back to prevent their closing before the tracheal walls had united.

The author comments on Jackson and Spencer's paper on arachidic bronchitis and suggests that the large tracheotomy, kept widely patulous with traction sutures affording the freest possible exit for secretions and particles of foreign body, is a very distinct advantage, as otherwise the patient would have been drowned in her own secretions. In all cases of peanuts in the respiratory tract, the author recommends tracheotomy as the first procedure without the insertion of a tracheotomy tube, and that the wound be kept widely open. ANDREW CAMPBELL.

Some Problems in the Extraction of Foreign Bodies from the Œsophagus, Air Passages, and the Natural Cavities. JEAN GUISEZ. (*Presse Médicale*, 25th November 1925.)

This article occupies two pages and is illustrated by four diagrams, two of which deal with the extraction of safety pins. One of these shows the author's own pin-closing forceps, working on the Clerf-Arrowsmith principle, and the other a slotted tube resembling that already made familiar by Mosher but without the trap-door. He points out that safety pins are most commonly swallowed by infants, and as no tube larger than 5 to 6 mm. in diameter can be used in these patients, this excludes the employment of his pin-closing forceps, and he has to fall back on the method of the slotted tube.

In the section dealing with the œsophagus stress is laid on the employment of local rather than general anæsthesia, and on the use of cocain applied by cotton mops for the relaxation of the local muscular spasm which prevents the mobilisation and proper orientation of an

impacted foreign body such as a tooth plate. For large foreign bodies such as the latter the author recommends the use of an oval tube, the dimensions being 18 to 20 × 16 mm.

In cases where a foreign body cannot be moved upwards but only downwards it is best pushed into the stomach and removed by gastrotomy, an operation more favourable to the patient than œsophagotomy.

In the bronchoscopic section he points out how easily a subglottic œdema can be caused in infants by stretching these tissues from the use of too large a tube or the removal of a foreign body which has become swollen (such as a nut kernel). There is a diagram illustrating a forceps of his own design for fruit stones, made so as to minimise the chance of losing the foreign body and perhaps even allowing it to slip into the opposite bronchus, an accident which (as in Hinsberg's case) may cause a sudden and fatal asphyxia by completely shutting off the only sound lung. He recommends that the firmness of the hold of the forceps should be tested before extraction by forcibly putting the foreign body against the end of the tube.

The methods described in both sections for dealing with special mechanical problems are already familiar to most endoscopists from their own experience and the teaching of Chevalier Jackson.

The article concludes by a short discussion of the question of low *versus* high bronchoscopy. The author's opinion is that the former procedure should be restricted to infants, to cases where the foreign body is too large to be removed safely by way of the glottis, and "lastly and above all" to cases in which the operator recognises his own lack of experience and fears he cannot do a high bronchoscopy without undue trauma. F. J. Cleminson.

Inflammatory Stenosis of the Œsophagus. Dr Jean Guisez. (*Bulletin d'Oto Rhino-Laryngologie*, Paris, January 1926.)

The author bases his report on fifty cases personally observed. He remarks that the typical case often presents a long period, up to twenty years, of premonitory symptoms; usually there are slight difficulties in swallowing, especially of fluids, more rapidly than normal. The important etiological factor is defective mastication. This leads to interference with the normal reflex of swallowing, and spasm of the œsophagus results. From retention of food, inflammation follows, and finally a fibrous stricture results. The cardia is the region most commonly affected, the hypopharynx next, and rarely other parts. Nearly all the cases occurred in males, and the age incidence was fifty and upwards. Malignant degeneration is not uncommon. Apart from the latter, the affection is painless; a purely mechanical obstruction may proceed actually to completeness. If the cardia is affected, great dilatation of the œsophagus is seen, the sac sometimes holding two litres.

Three types are recognised (1) the inflammatory, an early stage (2) the hypertrophic, with granulations or even polypus formation (3) the sclerosing. Only the second form resembles epithelioma. Treatment is by gradual dilatation of the stenosis by bougies; often at first only a filiform bougie will pass. The bougies should be left in for some hours. Details of eleven cases are appended.

E. WATSON-WILLIAMS.

MISCELLANEOUS.

Technic of Use of Removable Radium Seeds in Carcinoma of the Tongue. JOSEPH MUIR. (*Annals of Surgery*, Philadelphia, May 1926, Vol. lxxxiii., p. 598.)

This article describes a new technique of radium therapy in lingual carcinoma which offers a practical means of irradiating even the most inaccessible tongue lesions. This is accomplished by the implantation of removable platinum radon seeds. As the methods of treatment heretofore used have always proved unsatisfactory, this article is of especial importance from a clinical standpoint.

The various methods by which lingual carcinoma has previously been treated are discussed and their advantages and drawbacks considered. Imbedding of bare tubes according to Janeway's method affords an even distribution of radiation, but causes necrosis which is invariably followed by sloughing and may even induce unavoidable fatal hæmorrhage. If screened seeds are used, necrosis is avoided, but they are objectionable because they must remain in the tongue as foreign bodies. The platinum needles advocated by Regaud also obviate necrosis and can be removed when radiation has been accomplished, but proper distribution of these applicators is very difficult; they cause too much trauma; and above all, they are hard to immobilise and cannot be placed upon the posterior dorsal surface of the tongue.

The method offered in this article obviates all these difficulties, while retaining every desirable feature. The seeds are completely screened with platinum, thus doing away with necrosis and sloughing; they are easily withdrawn after adequate dosage has been delivered, so that they do not remain in the tissue as foreign bodies. These seeds can be placed in any position required, just as readily in the hitherto inaccessible "root" of the tongue, as in more favourable positions. The article is profusely illustrated, demonstrating the exact method of approach to these inaccessible lesions.

The growth is first carefully palpated, and the number of seeds required determined according to its depth and surface extent. When a seed has been placed in the desired position, the attached thread is

left protruding from the point of entry, where it is cut off so as to leave just enough to be readily grasped with forceps at the time of removal.

The entire treatment causes no pain, and but slight inconvenience to the patient; and when skilfully performed under proper aseptic precautions, the technique offers an excellent means of solving one of the most vexing of clinical problems. AUTHOR'S ABSTRACT.

Synergistic Analgesia in Head Surgery, with Special Reference to Novocain, Magnesium Sulphate, and Morphin. Dr J. J. KING. (*Laryngoscope*, Vol. xxxv., No. 3, p. 200.)

Gwathmey established the fact that morphin may be given in 25 or 5 per cent. solution of chemically pure magnesium sulphate, instead of water, and that in this combination the therapeutic value of the morphin is increased from 50 to 100 per cent. King uses two or three intramuscular injections of 2 c.c. sterile 50 per cent. solution of magnesium sulphate, combined with 2·5 per cent. novocain and one-eighth of a grain of morphin sulphate as a preliminary medication to local anæsthesia. This is wholly satisfactory for nearly all patients for tonsillectomy. Novocain, 0·5 per cent. is used for local infiltration, but without the infiltration only a third of the selected cases were successful.

The author's experience has been confined to tonsillectomies.

ANDREW CAMPBELL.

The Frequency of Cancer of the Upper Air Passages in Workers in Wood. Dr B. SÉKOULITCH, Bordeaux. (*Revue de Laryngologie*, 30th October 1925.)

The writer finds (1) that workers in wood, and those exposed to the irritation of sawdust, are specially liable to inflammatory affections of the nose, pharynx, and larynx. (2) That these occupations predispose also to cancerous affections of the same regions. Amongst 1000 cases attending hospital for these complaints 177 were wood-workers, and of the 177, 25 were cases of malignant disease.

Out of 894 cases of malignant tumours of the upper air passages, 118 occurred in wood-workers (15.2 per cent.).

Of 365 cases of malignant tumours in all situations, 39 occurred in wood-workers, and of the 39, 30 growths were found in the upper air passages and 4 in the œsophagus.

The writer discusses the question as to whether a specific "cancerogenic" substance is present in wood and its derivatives. He instances the production of cancer by the irritation of tar, soot, and coal dust, and concludes that there is a *primâ facie* case against wood and its derivatives, tannin, tar, resin, and other "essences," as agents in exciting the growth of malignant tumours. G. WILKINSON.