

## Abstracts

aural forceps passed into the temporo-sphenoidal lobe in an inward, backward, and forward direction for a distance of  $1\frac{1}{2}$  to 2 ins., in each case with negative result.

*Present condition.*—Wounds healed, drainage through meatus satisfactory and mastoid cavity healing normally; headache slight and only occasionally felt; appetite good; temperature normal since 1st inst.; ptosis, etc., as before.

Dr CONNAL said he had noticed it was stated that the temporo-sphenoidal lobe was explored with "closed aural forceps." He suggested that this was rather a futile proceeding, as one sometimes met with a thick-walled abscess sac, and if explored with sinus forceps, the sac might be pushed in front and the abscess not entered. He thought it would be better to explore with a sharp-pointed bistoury. Despite the negative Wassermann, in this case he thought a lumbar puncture should be done and the fluid examined.

Dr LOGAN TURNER thought that the aural suppuration might be merely an intercurrent affection and that the actual condition might be an intracranial neoplasm. He had tested the patient's gait and he (the patient) seemed to be a little unsteady. The headache and vomiting previously complained of had been relieved by the decompression operation, but the ptosis and the ophthalmoplegia, which were almost complete, suggested the possibility of such a lesion.

Dr SOUPER asked if X-rays had been taken of the cranium with regard to the condition of the sphenoidal sinus, and so on.

Dr LEITCH (in reply) said he need only say that within the past week pain in the eye had become marked. The ophthalmologist's further report to-day showed complete paralysis of the right third, fourth, ophthalmic division of the fifth and the sixth nerves. Fundi were normal. The ophthalmologist suggested a tumour of the apex of the right orbit. He (the speaker) agreed that the improvement following operation had been a "decompression" effect.

## ABSTRACTS

### THE EAR.

*The Relief of Catarrhal Deafness.* Sir JAMES DUNDAS-GRANT.  
(*Practitioner*, June 1925.)

For practitioners the simple test suggested by the author to determine whether a case is likely to benefit by a course of inflation consists in whether or not the patient "cracks his ears" on blowing down the nose with the nostrils closed. When this occurs, and some benefit to hearing is obtained, the patient may be taught self-inflation by the author's method. A rubber tube with nose-piece and mouth-piece is used, and by means of this, chloroform vapour is blown up the

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nostril till it is felt in the nasopharynx. The latter part of the paper deals with the treatment of the associated catarrh; correction of deformities, the application of the cautery to congested turbinals, the use of vaccines as well as sprays and unguents are each given their place in the scheme of treatment.

T. RITCHIE RODGER.

*Mucosus Otitis.* Dr F. O. KETTELKAMP. (*Laryngoscope*, vol. lxxxiv., p. 44.)

A short account is given of the clinical picture of an ordinary otitis media as compared with that caused by the streptococcus mucosus capsulatus.

Bacteriologically, Neumann and Ruttin distinguish two large groups as causing an acute otitis, the capsulated and the non-capsulated. The non-capsulated bacteria give rise to an otitis which most of us would describe as typical, with severe pain, deafness, bulging, perforation, discharge, etc. The capsulated bacteria, however, give rise to a special type, the mucosus otitis, and this variety is characterised by its lack of character till the mischief is done. The original ear condition may be evanescent and hardly noticed by the patient; the drumhead presents little or no signs of inflammation. The hearing may be normal in the early stages. The mastoid is not tender, or only a little. If, however, the mastoid were opened at this stage, one would be amazed at the wide destruction of bone, the sinus and dura mater being often exposed by the disease. There is little fever. The otologist will observe that in spite of the quiet onset and the possible absence of suppuration, as evidenced by discharge from the meatus, the patient does not feel well and is conscious of his ear. It is usually for this vague complaint that the patient seeks relief, if indeed he comes at all before he is beyond help. If closely questioned, the patient will admit slight or indefinite pain in the ear, perhaps weeks or months ago, and since then he has had a strange feeling in the ear and is perhaps slightly deaf. There may be slight evidence of inflammation in the drum, or a passing œdema of the mastoid process. The vague symptoms will put the otologist on his guard.

A few case records from the files of the Neumann clinic are given, and as each closes with a post-mortem report, it is well to look upon a mild otitis with vague uneasy symptoms, with considerable suspicion. The results of a mistaken diagnosis are too disastrous. The diplococcus lanceolatus capsulatus causes the same type of disease as the streptococcus mucosus, but it is comforting to know that otitis due to the capsulated bacteria is rare as compared with that caused by the non-capsulated.

ANDREW CAMPBELL,

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*Treatment of Chronic Suppurative and Catarrhal Otitis Media by the Solution of Calot.* V. FOTIADI. (*Archives Internat. de Laryngol.*, November 1925.)

The chronicity of suppurative otitis media has been attributed either to faulty or neglected treatment, or to the virulence of the microbial infection. Of these two causes, the author believes that the latter is the more important. He emphasises the difficulty of sterilising the complicated middle-ear tract. Of the many forms of local treatment, he finds the instillation of drops of Calot's solution the most successful. Indeed, he states that he has rarely or ever had a failure with Calot's solution. The formula of the solution is not given, but is stated to contain guaiacol, creosote, iodoform and sulphuric ether.\* The pharmacological action of these ingredients is briefly described. The treatment consists in the daily cleansing of the meatus of pus and of the daily instillation of 10 drops of Calot's solution which is pressed into the deeper portions of the ear by tragal pressure. This latter process must be continued until the patient states that the solution has passed into the nasopharynx.

M. VLASTO.

*A Contribution to the Anatomy of the Eighth Nerve.* ISAO YOSHIDA. (*Zentralblatt f. Hals-, Nasen-, und Ohrenheilkunde*, 1925, Bd. vii., pp. 533-4.)

In the second stage of the cochlear division a double tract from the primary nucleus must be considered—(1) The ventral acoustic tract; (2) the striæ acusticæ; in the latter, distinction is made between the "tract of the tubercle" of Held, and the dorsal tract from the ventral acoustic nucleus known as "Held's bundle."

The author has studied by the Nissl method the changes produced in the medulla of a guinea-pig and two rabbits by a transcerebellar destruction of the left formatio reticularis.

In the guinea-pig and one rabbit the nucleus triangularis and the upper part of the ventral acoustic nucleus were damaged; as a consequence there was conspicuous degeneration of the tuberculum acusticum.

The following conclusions were drawn from the histological findings; the axons of the cells of the dorsal division of the acoustic nucleus do not pass ventro-medially into the trapezoid body, but dorsally around the corpus restiforme; the bundle of Held was found divided on the operated side; it must, therefore, escape from the dorsal division of the ventral nucleus.

\* Martindale's Extra-Pharmacopœia gives Calot's formula as follows: Liquid paraffin, 70 grms., sterilised by boiling for half an hour. Allow to cool and add in order (1) creosote, 5 grms.; (2) guaiacol, 1 grm.; (3) iodoform (sterile), 10 grms.; (4) ether, 30 grms.

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Although the abducens nucleus, the formatio reticularis around the facialis nucleus, and the extension of the upper olive were almost entirely destroyed, the cells of the actual grey matter of the upper olive appeared intact. This gives no confirmation to the view that the axons of the upper olive cells pass into the abducens and facial nuclei, by way of the formatio reticularis. Further research on these points is necessary.

F. WATKYN-THOMAS.

*The Origin of the Cortico-Petal Auditory Tract in the Guinea-Pig.*  
ISAO YOSHIDA. (*Zentralblatt f. Hals-, Nasen-, und Ohrenheilkunde.*  
1925, Bd. vii., p. 534.)

The author points out that, although it is generally believed that the cortico-petal tract arises in the internal geniculate body there has been no certain proof as to how much each geniculate body contributes to the tract since, up to now, no one has studied the degeneration produced in the internal geniculate bodies by destruction of the temporal lobe. Yoshida destroyed the cortical area of the left temporal lobe, killed the animals fourteen days later, and examined the sections stained by the Nissl method.

In only one animal was there a complete destruction of the temporal cortex without appreciable damage to other regions. In this animal the ventral nucleus, and the medio-ventral portion of the dorsal nucleus of the internal corpus geniculatum, showed clear degeneration. There was also marked degeneration of part of the cell group of Winkler. The surrounding nuclei and the internal geniculate body of the opposite side were intact.

It seems probable, therefore, that the cortico-petal tract arises principally from the ventral nucleus, and in part also from the antero-ventral portion of the dorsal nucleus.

A very similar result was obtained in another animal, with the exception of a degeneration of the lateral corpus geniculatum, which was probably due to an accompanying injury to the occipital cortex.

In both cases the posterior corpora quadrigemina of both sides were intact. The author is of opinion that these structures do not send any axons into the auditory centre.

F. WATKYN-THOMAS.

*Sensory Aphasia in Otogenic Extradural Abscess in the Left Middle Cranial Fossa.* H. THORMANN, Rostock. (*Zeitschrift für Hals-, Nasen-, und Ohrenheilk.*, Vol. xi., Part IV., p. 430.)

Sensory aphasia is the most certain and frequent symptom of left-sided temporo-sphenoidal abscess, as is also an opposite-sided hemiplegia, but in a few instances such symptoms have been caused by an extradural abscess. The diagnosis between the two conditions can only be arrived at by operative exploration, unless there is

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present the typical partial oculo-motor paresis which indicates temporo-sphenoidal abscess.

A case is described in which the veteran Professor Körner operated and in which gradual recovery took place.

JAMES DUNDAS-GRANT.

*Drainage of Cerebral Abscesses of Otitic Origin.* Dr PEDRO L. ERRECART. (*Revista Espanola y Americana de Laringologia, Otologia y Rinologia*, 1925, No. 1 (January-February, Madrid).)

The structure of the temporal bone is such that there is every likelihood of collections of pus forming and of tracking through the thinner portions of the bone into the neighbouring intracranial structures. The cranial cavity is well protected from the outside but only very poorly from the middle and internal ears. The cerebral abscess is usually formed in connection with an old chronic suppurative otitis and may be due to direct extension of the infection through the meninges, infection along one of the venous sinuses, or by the general blood stream. The former is the most common—and is accompanied by a plastic meningitis which forms protective adhesions and limits the disease to the immediate vicinity of its track. It is through this track that the abscess must be sought and drained. The ear and mastoid process must be thoroughly cleared out and the dura mater inspected so that the affected area can be detected. A crucial incision is made in the dura mater, and without disturbing the adhesions the temporo-sphenoidal lobe is explored. The pus is evacuated and drainage is maintained by a cylindrical glass tube of a calibre of about 5 mm. perforated by a number of small lateral holes. The tube is secured by a number of horsehair sutures. The author uses a glass tube because he thinks that a rubber tube disposes towards hernia of the brain, to encephalitis, to irritative phenomena, and to a hypersecretion and hypertension of the cerebro-spinal fluid.

F. C. ORMEROD.

### THE NOSE AND ACCESSORY SINUSES.

*A Contribution to the Development of Deviation of the Nasal Septum.* OSKAR HIRSCH. (*Monatss. f. Ohrenheilk.*, No. 10, 1925.)

The author surveys the various theories as to the causation of this deformity, with a critical discussion on the theories propounded. Included therewith, are the results of his own observations and a study of this condition associated with arrests of development of the face (cleft palate, etc.). He comes to the conclusion that no one definite cause is yet assignable.

The article forms an excellent contribution to the literature on the subject.

ALEX. R. TWEEDIE.

## Nose and Accessory Sinuses

*An Interesting Case of Orbital Infection Secondary to Maxillary Sinus Inflammation.* F. H. STIBBE, Rotterdam. (*Acta Oto-Laryngologica*, 1925, Vol. vii., fasc. 3.)

A case is described in detail in which swelling of the eyelids followed by fistula below the internal orbital ligament occurred, the cause being traced to maxillary sinus inflammation. The infection passed through a pre-lacrymal recess in the sinus and then into the ethmoid, finally perforating the inner orbital wall. H. V. FORSTER.

*Anatomically Irregular Sphenoidal Sinuses with Sinusitis and Optic Neuritis, localised by the Suction Syringe. With two examples.* PATRICK WATSON-WILLIAMS. (*Lancet*, 1925, Vol. ii, p. 858.)

Two cases are described in men of 21 and 41 respectively. The clinical reports are given in detail. The reporter knows of no method, other than that of exploration by the sinus syringe, whereby the infections would have been localised during life. In the first case the sphenoidal sinuses were explored and found to communicate. In the second instance, a sterile left sinus extended across the midline and was easily entered through either naris. A small and undeveloped right sinus was, therefore, missed until two cannulæ were passed at the same time and sterile water was syringed through.

MACLEOD YEARSLEY.

*Treatment of Optic Nerve Involvements as determined by Optic Canal and Nose Radiographs.* LEON E. WHITE. (*Laryngoscope*, Vol. xxxiv., p. 255.)

In a recent study at the Harvard Medical School, the optic foramina were found to vary in size from 4 to 6.5 mm., and in shape from the usually circular to various degrees of ovals. The question arises as to whether such variations explain why some optic nerves become involved and others escape.

Extensive pneumatisation around the foramen causes distortion and narrowing, rendering the nerve more vulnerable. The size and shape of the canal can be determined by careful radiography. Clinical data at present indicate that there is great danger of permanent impairment of vision whenever a severe neuritis occurs in canals abnormally small, while with the same impairment of vision in a normal canal, spontaneous recovery may be expected. Neuritis, either acute or chronic, in the normal or abnormally large canals, seems to be usually of extra-nasal origin.

With further study, if these findings prove to be conclusive, they will be of great value in the differential diagnosis of neuritis caused by intracranial, luetic and accessory sinus disease, and multiple sclerosis.

ANDREW CAMPBELL.

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*The Significance and Prevention of Blindness due to Intranasal Disease.*  
MARK J. GOTTLIEB, M.D., New York. (*American Journal of Surgery*, July 1925.)

Blindness due to disease of the nasal accessory sinuses is far more frequent than is commonly believed. It is surprising to note the number of people with concentric contractions of the fixed vision, many of them unaware of their condition. The optic canals vary in their shape and size. The smaller and more distorted the optic canal, the more likely it is that the optic nerve will become involved from disease of the neighbouring structures. The size and shape of the optic canals can be determined by X-ray pictures. The value of this is emphasised. In retrobulbar optic neuritis where the canal is large there is no haste for operation as the condition is not due to direct extension but more probably due to absorption from some focus of infection, or absorption of poison, or to a general disease. The condition is usually not accompanied by the production of purulent material. The finding of purulent ethmoiditis and sphenoiditis is not the rule. X-ray pictures are usually negative and misleading. Positive signs may be present in some cases—deviations of the septum, enlargements of middle turbinates, etc., but even in cases where they are absent, exenteration of the sinuses is followed by speedy clearing up of the eye condition. The morbid anatomy is vague and indefinite.

Several cases are reported, and the following is the summary of the paper: 1. Retrobulbar optic neuritis is caused by disease of the posterior ethmoid and sphenoidal sinuses in the great majority of cases. 2. If time permits all causes should be excluded before operating. 3. If time is precious one is justified in opening up the sinuses without further investigation. 4. The element of haste is so important that it cannot be over-emphasised. 5. The middle turbinates should not be spared in any instance.

NICOL M. RANKIN.

*Intracranial Complications of Posterior Sinus Infection.* FINK.  
(*Surgery, Gynaecology, and Obstetrics*, November 1925, No. 5, p. 589).

The article is a somewhat long one, well illustrated, with a bibliography.

Attention is called to the relative frequency of sinus disease and intracranial suppuration, demonstrated when a routine examination of the nasal sinuses is undertaken in the post-mortem room, sometimes with as high a percentage as 50.

Infections of the sphenoidal sinus appear to be associated with the highest mortality, those of the ethmoid being second. The anatomy of the various sinuses is carefully discussed, and special attention drawn to the possibility of danger arising from dehiscences.

## Peroral Endoscopy

The methods of extensions from the sinuses are classified into (a) by direct continuity, (b) by thrombo-phlebitis, and (c) by regional metastases. In the case of the sphenoidal sinus the most common method of extension is from the veins of the cavernous sinus.

*Eye Complications.*—Apart from extension to the tissues of the eyeball, the most common complication is retrobulbar neuritis, which is a toxic involvement of the optic nerve sheath from material passing through the perivascular lymphatics. MUSGRAVE WOODMAN.

### PERORAL ENDOSCOPY

*Overlooked Cases of Foreign Body in the Air and Food Passages.*  
CHEVALIER JACKSON, M.D., Sc.D., F.A.C.S. (*Brit. Med. Journ.*,  
17th October 1925.)

Of 1485 cases of foreign body treated in the author's clinic during the past twenty years, over 200 had been overlooked for periods varying from one month to thirty-six years. The chief factor contributing to these unfortunate failures was the omission on the part of the medical attendant to keep foreign body in mind as a diagnostic possibility.

A definite history is frequently unobtainable, especially in the case of very young children, and it is possible even for an intelligent adult to aspirate a foreign body without being conscious of doing so. An instance is given of a sober, business man aspirating the cap of an atomiser which was long afterwards discovered by X-rays when the patient was undergoing treatment for tuberculosis. In many of the cases on the other hand, a clear history had been discredited by the medical attendant who was misled by the symptomless interval which generally follows the initial signs. Metallic bodies particularly may be tolerated for a long time without giving rise to signs of their presence. This is most true of the air passages, but even in the œsophagus the same may occur.

Occasionally also foreign bodies are missed because more than one are present, and the removal or expulsion of one has satisfied the patient and attendant. In other cases, particularly where vegetable bodies have been aspirated, the complications ensuing have absorbed the attention of the practitioner who has been content to treat what seemed to be pneumonia, broncho-pneumonia, or tuberculosis without considering the possibility of foreign body. Asthma was the erroneous diagnosis of so many of the cases (48 out of the 200) that the author holds that in every case presenting symptoms of asthma foreign body ought to be considered. The asthmatoïd signs found in these cases include wheezing, paroxysms of coughing, and cyanosis.



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The symptoms are probably due to accumulation of secretions during the first sleep of a tired child. In 18 of the cases referred to, the asthmatoïd symptoms were due to foreign body in the œsophagus, sometimes from pressure on the "party wall," at other times from overflow of secretions from the hypopharynx into the larynx; in a third group of cases the obstructive signs were due to œdematous laryngitis following attempts at removal. "Winter bronchitis" had been the diagnosis in 18 cases, and in 5 of these the foreign body was in the œsophagus. It is assumed that during the summer the open-air life of the patient maintained the bronchial mucosa in better condition, so that in spite of the presence of a foreign body no symptoms appeared. Many patients had been treated for pulmonary tuberculosis, but cases long overlooked are becoming more rare since it became customary to make routine use of the X-rays in the diagnosis of tubercle.

The author states that in quite a number of cases the diagnosis has been enlarged tonsils and adenoids on account of the noisy breathing. One such case was discovered by the anæsthetist, who, during his routine examination of the chest before operation, noted diminished breath sounds on one side. In 10 cases foreign bodies had been aspirated during general anæsthesia, but the subsequent symptoms were attributed to post-anæsthetic complications without considering the possibility of foreign body. In a large number of cases also, the patient's fears have been allayed by the medical attendant's assurance that if a foreign body had been swallowed it would pass by the bowel.

When the aspirated substance is a non-opaque vegetable body the difficulty of diagnosis and the severity of the complicating symptoms are alike greater.

The author thinks that many children must have died with vegetable foreign bodies in their bronchi, certified as dying from pneumonia or broncho-pneumonia, and estimates that at least 90 per cent. of all cases could have been saved by early removal. Even late removal, when copious pus is present, is often followed by speedy recovery.

As regards treatment "no procedure other than peroral bronchoscopy is entitled to a moment's consideration in the ordinary case of foreign body in the lung." Immediate tracheotomy may possibly have to be done in a case of obstructive laryngeal dyspnoea, but the author has never found it necessary to do tracheotomy for the introduction of a bronchoscope. If the suppurative process has reached the pleural cavity the latter may have to be drained by the usual surgical methods, but the foreign body will still have to be removed by peroral bronchoscopy.

T. RITCHIE RODGER.

# Peroral Endoscopy

*Discussion on Dr Chevalier Jackson's Paper.* THOMAS McCRAE,  
M.D., F.R.C.P. (*Brit. Med. Journ.*, July 1925.)

Professor McCrae, speaking as a physician, said that the endoscopist has a right to ask of the physician and the general practitioner that they should be alert and make the diagnosis of foreign body promptly. In return they have a right to expect that in every centre a sufficient number of laryngologists will make themselves really proficient in endoscopy to ensure skilful and safe handling of these cases. Like Dr Jackson, he emphasises the need for keeping foreign body always in mind as a possible diagnosis in lung conditions. The physician and the radiologist must always work hand-in-hand. In cases of opaque foreign body the radiologist may be the more important partner, while the physician has the advantage where a vegetable substance has been aspirated.

When a foreign body has reached a bronchus certain mechanical results may follow: (1) Complete plugging; (2) partial obstruction; (3) a ball-valve action, air being admitted but not let out; (4) a variable condition, such as complete blocking at times by secretion, with periodic release; (5) such objects as a common pin may produce no obstruction at all. In the first class of case collapse of the affected lobe or lung results. There will be entire absence of breath sounds and vocal fremitus with marked dullness. Of special importance is displacement of the heart to the affected side. If complete obstruction is not produced immediately, "drowned lung" is the result with fluid in the tissues and in the air cells. Where the bronchus is partially obstructed the physical signs vary greatly but as a rule movement is decreased, as also is vocal fremitus; the percussion note is impaired and there may be tympany. When ball-valve action occurs a very characteristic picture presents itself. The affected side is over-distended so that the sound side is smaller and may be looked upon as the affected one; the sound side moves with respiration, however, while the other does not. Percussion on the affected side yields a hyper-resonant note or some degree of tympany. As a rule no breath sounds are heard. The contrast of the X-ray plates taken at full inspiration and full expiration is very marked.

Where secretion (in Class 4) is a marked feature *râles* may be heard on the unaffected side from overflow at the bifurcation. The signs are most marked in cases of vegetable foreign body, and, as a rule, the younger the patient the worse they are. The most frequent error is to regard the case as pneumonia. The fever, increased respiration rate, dyspnoea, cyanosis, rapid pulse, toxæmia, and the general severity of the infection naturally suggest pneumonia, but the speaker had never seen pneumonia following the aspiration of a foreign body. Sometimes empyema had been diagnosed and with some excuse.

T. RITCHIE RODGER.

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## MISCELLANEOUS.

*Free Transplantation of Bone, Cartilage, and Fat in Oto-Rhino-Laryngology (from the Biological and Clinical Standpoint).*  
S. BOURACK, Charkow-Minisk. (*Zeitschrift für Hals-, Nasen-, und Ohrenheilk.*, Vol. xi., Part 4, p. 441.)

The author holds that fat transplantation should be practised much more frequently in oto-rhino-laryngological surgery. Apart from general indications, he finds it most applicable in cases of obstinate parotid fistulæ, and of mastoid antrotomies in which the healing of the wound has a protracted torpid course. He has very little to say in favour of the transplantation of bone or cartilage (preferring local shifting of prominences or even paraffin injections) in cases of saddle-nose, and considers that even the successful cases must be submitted to the test of time. In frontal depression after Killian's radical operation, as also in saddle-nose, he has found fat transplantation very successful.

JAMES DUNDAS-GRANT.

*Toxic Effects of Alypin and Psicain.* F. MANSKY. (*Zeitschrift für Laryngologie, Rhinologie, etc.*, October 1925, pp. 429-435.)

Three cases of serious collapse after alypin, and one death after the use of psicain are reported. They occurred during a period of three years at one clinic in Dresden.

Case I.—Local anæsthesia with cotton-wool plugs containing 20 per cent. alypin-adrenalin solution previous to turbinectomy. Eight minutes later sudden collapse with cyanosis, clonic spasms of both extremities, slow recovery after injections of camphor. One hour later a second attack requiring artificial respiration; 5 c.c. of 10 per cent. calcium chloride solution were given intravenously; recovery.

Cases II. and III. showed a similar train of symptoms with recovery. The local anæsthetic used was powdered alypin made up with sugar (1 part alypin, 4 parts sugar) which was insufflated into the nasopharynx.

In Case IV., where psicain powder was used, the collapse and attacks of spasm ended in death, in spite of prolonged artificial respiration and intracardiac injection of adrenalin. The case was that of a boy aged 15. The post-mortem revealed status lymphaticus, established on the evidence of enlarged tonsils, adenoids, and a large lingual tonsil; also the presence of lymph follicles in each sinus pyriformis and a somewhat large thymus.

The question of overdosage does not arise in any of the four cases, and the only explanation given is individual susceptibility. The method of insufflating the anæsthetic agent in powder form is said to be quite safe. Cocain powder (1 in 4) had been used at this clinic for thirty years without a case of poisoning.

J. KEEN.