

# Abstracts

## DISCUSSION.

C. A. B. HORSFORD recommended Mr. Macbeth to carry out operation. Both vocal cords were mobile and opposed perfectly, so that there would be no fear of adhesion or scarring with lack of a good voice in the future, and excision would be easy. The case recalled another in which a similar webbing had appeared as the result of trauma—in fact attempted suicide—in which the patient, a woman, did not cut right through the larynx, and a large fibrous web had appeared. After operation, although the patient was always short of breath, she acquired a voice. The cords were immobile, but the general health and breathing improved.

G. EWART MARTIN suggested that in this case the condition should be left entirely alone. There was no inconvenience at all, the man had no shortness of breath, he could carry on his work perfectly well, and his only difficulty was in speaking. He (the speaker) did not think that even if the cords were touched it would be possible to teach the patient—at his age—to speak any differently.

J. C. HOGG said that some years ago he had seen a similar condition in the larynx of a young man. An attempt was made to divide the web by means of diathermy. A fine electrode was used and the web was divided along one vocal cord only, allowing the rest to fall free. He had seen the patient two years later. The result was quite good; about nine-tenths of the divided web had disappeared and only a small amount was left. The voice, which had been very weak, became strong and serviceable.

## ABSTRACTS

### EAR

*A Hitherto Unrecognized Danger in the Operation of Ramadier for Suppuration of the Petrous Pyramid.* STACEY R. GUILD (Baltimore). (*Acta Oto-Laryngologica*, November 1st-December 31st, 1937, xxv, 6.)

In the microscopical material collected by the Otological research laboratory of Johns Hopkins University the author has found five cases (two of them bi-lateral) in which the wall of the internal carotid was adherent to the bone.

He draws attention to the risk associated with this condition which has not been noted before, in performing an operation for apicitis by Ramadier's method. The risk will be all the greater if the adherent part—and this might even be the case in young people—happened to be calcified or very thin. The recognition of such a possibility might prevent a catastrophe.

Photographs of four cases are illustrated.

[Author's summary.]

H. V. FORSTER.

## Ear

*The Sinus Thrombosis Material of the Sahlgren Hospital, 1910-36.*

W. BEHRMAN (Gothenburg). (*Acta Oto-Laryngologica*, November 1st-December 31st, 1937, xxv, 6.)

The author records 104 verified cases of sinus thrombosis with a percentage of cures of  $68.2 \pm 4.6$  per cent. The original attack was one of acute otitis media in  $65.3 \pm 4.7$  per cent. of cases, a predominance of statistically established acute otitis also found in other Swedish records. It is impossible to establish a certain difference between the percentage of cures in the cases resulting from acute otitis and those caused by chronic otitis, or between the cases treated by ligature of the jugular vein (fewer cases) and those not so ligatured.

In more than a third of the cases an operation on the jugular bulb was performed, which was often followed by rapid improvement. In no case was the facial nerve damaged. The author is opposed to the application, from the point of view of cures, of a less reliable system for comparing the various series of treated cases and draws attention to the need of mathematical proof of the percentages by applying the methods which are used in the science of statistics.

[Translation of Author's summary.]

H. V. FORSTER.

*Acute or Chronic Otitis.* MARCUS DIAMANT (Halmstad). (*Acta Oto-Laryngologica*, November 1st-December 31st, 1937, xxv, 6.)

The author gives an account of two cases of cholesteatoma behind a perfectly intact and macroscopically undamaged tympanic membrane. He advances the possibility that in the so-called otitis media chronica cholesteatomatosa the marginal perforation in the region of the attic and antrum is not usually a product of the otitic process. Rather, it may be thought to develop through internal pressure of the lateral boundary of the epitympanum and the most adjacent part of the tympanic membrane, the pressure being caused by an extensively increasing germ of cholesteatoma. The way in which the latter develops is actually an object for discussion, its "otitic" origin having, however, not yet been proved. Afterwards chronic otitis can set in because of secondary infection from without of the cholesteatoma cavity, owing to the marginal perforation having opened this cavity towards the auditory canal.

The author finds support for this theory, partly through Wittmaack's theories on the importance of pneumatization disturbances in the development of chronic otitis; partly, on the basis of later experience, regarding the way in which infections are brought to the ear.

Finally the author gives a schematic representation of the possibilities for development of various forms of otitis which are

## Abstracts

found in the different combinations of these three factors. This schematic illustration is based on :

- (1) The Wittmaack theory.
- (2) The way in which the infection is spread.
- (3) The suggestion that the germ of cholesteatoma is primary to the marginal perforation of the tympanic membrane.

H. V. FORSTER.

*Treatment of Lateral Sinus Infections without Operation on the Jugular Vein.* E. MILES ATKINSON (New York). (*Archives of Otolaryngology*, February, 1938, xxvii, 2.)

Since Zaufal introduced the operation in 1880, the orthodox teaching has been that if a thrombosed lateral sinus is found, the internal jugular vein should be ligatured. It has recently been felt, however, that ligature of the jugular need not be practised in every case of sinus thrombosis. Such a ligature does not occlude all paths by which infection may spread. Moreover the point of ligature may actually serve as a focus for further thrombosis. Ligature of the internal jugular vein is not an easy procedure when the vein is small and surrounded by inflamed glands, and it adds considerably to the duration and severity of the operation. Another argument against ligature is that infection of the lateral sinus shows a marked tendency to spontaneous cure if infected tissue is removed and free drainage provided.

Reporting upon sixty-one cases of sinus thrombosis, Grünberg, in 1925, stated that ligature was performed in twenty-one cases. The recovery rate in this group was 15 per cent., and in the cases not ligatured it was 60 per cent. Other observers (Körner, Undritz) report that the recovery rate is the same in the ligatured cases as in those not ligatured.

The present writer advises ligature only if symptoms continue after the sinus has been dealt with. The sinus itself is opened only if the wall is necrotic and an occluding thrombus is present. A mural clot is a protective mechanism which should be left undisturbed. Fifteen consecutive cases are reported and all the patients recovered. In eight cases the finding was perisinus abscess and granulations on the sinus wall, and the treatment was full exposure. In five cases the presence of gross thrombus formation demanded occlusion of the sinus. In two cases only was it necessary to ligature the jugular vein. The signs which suggest extension of infection into the jugular vein are tenderness along its course (palpate very gently!), enlarged palpable lymphatic glands, and repeated rigors after operation on the sinus.

## Ear

Exposure of the jugular bulb is a severe and dangerous operation which is seldom necessary.

The paper is accompanied by brief notes of the cases and by a number of references.

DOUGLAS GUTHRIE.

*Otitic Sepsis.* A. C. JUERS (Owensboro, Ky.). (*Archives of Otolaryngology*, February, 1938, xxvii, 2.)

The writer objects to the use of the terms sinus phlebitis and sinus thrombosis, preferring the broader designation, "otitic sepsis", indicating an infection of the blood stream secondary to otitis or mastoiditis. He reports a series of twenty-one cases with an analytical commentary. The mortality was 24 per cent. In all the adult cases a definite rigor preceded the rise of temperature but the sign was absent in patients below ten years of age. Blood culture gave positive results in eleven cases. The Ayer-Tobey modification of the Queckenstedt test was of value in determining which sinus was involved in a case of bilateral mastoiditis, and in several cases it gave useful information as to the patency of the sinus.

In ten cases the jugular vein was ligatured. Few otologists now use ligation as a routine procedure in all cases. The present writer regards it as of little value in the treatment of otitic sepsis. He summarizes certain anatomical details regarding the jugular and condyloid foramina and the mastoid emissary foramen, based upon the measurements of 145 skulls.

DOUGLAS GUTHRIE.

*Isolated Vestibular Affection.* O. BACH (Copenhagen). (*Acta Otolaryngologica*, January 1st-February 28th, 1938, xxvi, 1.)

A woman aged twenty-eight, previously healthy, sought advice for a suppurating tuberculous gland, and complained of marked lassitude. She had never shown any evidence of ear disease before. Examination showed a normal drumhead and normal hearing, but the vestibular function proved to be absent. The cause of this condition is unknown.

All previously reported cases of absent vestibular function but with normal hearing have been syphilitic and have always given a history of vertigo.

[Author's abstract.]

H. V. FORSTER.

*The Significance of the Artery of the Handle of the Malleus in Arterial hypertension.* A. MONTEIRO (Rio de Janeiro). (*Acta Otolaryngologica*, January 1st-February 28th, 1938, xxvi, 1.)

Whilst examining patients complaining of ringing in the ears, swimming sensations in the head, and headache, the author observed

## Abstracts

the artery of the malleus handle on the tympanum. In these patients the hearing was more or less normal. He thinks this condition to be associated with hypertension.

Two of fifteen patients mentioned by the author were not suspected of hypertension, though it was discovered on further examination. In two other cases who were bled, the artery of the malleus handle faded from view a few hours later.

The author concludes :

(a) The artery of the malleus handle is to be noticed in some patients with arterial hypertension.

(b) In a patient with tinnitus the observation of the artery may serve as a danger sign of general vascular disease.

(c) In established hypertension its presence should be considered a warning of an approaching crisis.

H. V. FORSTER.

*The Treatment of Acute Suppurative Otitis Media.* A. TUMARKIN.  
(*Lancet*, 1938, i, 1212.)

The author rightly asserts that the treatment of these cases by general practitioners and in so-called minor ailment clinics is "ineffective to the last degree". They are not adequately cleansed nor are remedies efficiently applied. The technical difficulties are considerable and standard instruments quite inadequate. He describes two simple instruments, a wool-carrier of twisted wire and a powder blower, both of his own invention, which will enable even untrained workers to give efficient home treatment. The article is a plain statement of what is a serious blot upon the present system of school medical service, responsible for many unneeded mastoid operations and much avoidable deafness.

MACLEOD YEARSLEY.

*Nasal Plethysmometry as a means of diagnosis of the permeability of the Sigmoid Sinus and the Jugular Vein.*

H. A. E. VAN DISHOECK (Amsterdam). (*Acta Oto-Laryngologica*, January 1st-February 28th, 1938, xxvi, 1.)

In the case of obliteration of one jugular vein by means of unilateral compression of the neck a swelling of the inferior concha of the nose on the same side can be observed. The origin of this symptom is a congestion of the pterygoid plexus by venous blood coming from the endocranium. In a few cases this symptom can be seen on anterior rhinoscopy. By means of a specially constructed nasal plethysmometer the swelling of the nose can be detected in nearly every case. Consequently this phenomenon can be used as a symptom of obstruction of the jugular vein and of the sigmoid sinus in cases of thrombosis, of pressure by brain tumour or brain abscess, and of congenital absence of the sinus or the jugular vein.

## Nose and Accessory Sinuses

Under these circumstances the symptom will be negative on the side of the obliteration, and strongly positive on the other side.

[Author's abstract.]

H. V. FORSTER.

### NOSE AND ACCESSORY SINUSES

*Isolated Paresis of the External Motor Nerve of the Eye.*

M. DIAMANT (Halmstad). (*Acta Oto-Laryngologica*, November 1st-December 31st, 1937, xxv, 6.)

The author gives an account of two cases of isolated unilateral abducens paresis with polypoid ethmoiditis on the same side without changes in the sphenoid, in which the abducens paresis was promptly relieved after ethmoidectomy. He points out that in cases of abnormal spread of ethmoidal cells—a not infrequent occurrence—the same conditions obtain for the development of isolated abducens paresis as in the case of abnormal spread of mastoid cells to the petrous pyramid which may be infected and cause petrositis.

[Author's summary.]

H. V. FORSTER.

*The electrogram of the alae nasi during dyspnoea and strenuous exertion.* H. A. E. VAN DISHOECK (Amsterdam). (*Acta Oto-Laryngologica*, January 1st-February 28th, 1938, xxvi, 1.)

During involuntary stimulation of the respiratory centre by dyspnoea and strenuous exertion the muscles of the alae nasi and the respiratory musculature always act together, independent of respiration being buccal or nasal. In addition to this combined action a partial action is possible in the case of nasal respiration, buccal respiration, sniffing, etc.

In some of these automatic movements the contractions of the muscles of the alae nasi are present, in others not. These automatic movements are probably learned during the first years of childhood.

[Author's abstract.]

H. V. FORSTER.

*Osteo-Fibroma of the Frontal Sinus with a typical Calcification.*

C. E. BENJAMINS (Groningen). (*Acta Oto-Laryngologica*, January 1st-February 28th, 1938, xxvi, 1.)

A form of tumour has been described which is clinically characterized by its very slow growth, the absence of metastases, and its recurrence after removal. Its growth is not massive, but more or less a superficial progress, producing pseudo-cysts covered with tumour tissue. The extension of these cysts make the surrounding parts recede, affecting in this case the contents of the orbit and the

## Abstracts

wall of the cerebral cavity, which may undergo erosion while the dura remains intact. Up till now this form of tumour has only been found in or near the frontal sinus, but there is no reason to think that it cannot arise in other parts, such as the nose or accessory sinuses.

The X-ray picture shows a shadow, which is not homogeneous as in other bony tumours, for instance those of osteitis fibrosa, which makes the diagnosis difficult. A typical finding at the operation is the presence of brittle tissue, which on division shows hard granules projecting towards the surface. In microscopical sections numerous hyalin bodies with some cell inclusions and centrally situated irregular precipitations of lime may be found imbedded in a stroma of spindle shaped cells. The hyalin bodies have the structure of osteoid substance and react in the same way to staining. The fundamental tissue suggests a fibroma, and for this reason the tumour may be called osteoid-fibroma with atypical calcification.

The prognosis is favourable ; they belong to the benign tumours and the only efficient treatment is surgical. A thorough curettage may suffice, which may eventually be followed by irradiation.

[Author's abstract.]

H. V. FORSTER.

*Chronic Suppurative Maxillary Sinusitis.* Prof. CARLOS LARROUBÉ (Lisbon). (*Les Annales d'Oto-laryngologie*, March, 1938.)

It is not a difficult matter to diagnose an antral suppuration, the difficulty lies in diagnosing the degree of gravity of the mucous membrane lesions and, therefore, of the particular therapeutic measures to be adopted. The present article aims at putting a stop to haphazard surgery and at lifting it above the domain of empiricism by establishing the facts on which a sound diagnosis can be made. After recapitulating the known clinical features of antral suppuration the author states that "puncture lavage of the antrum with a positive result merely tells us that there is pus in the antrum : it does not tell us where it originally came from. Similarly, a negative result must not be taken as an indication that the antrum is healthy". Transillumination, we are informed, is a toy of very little value. Simple radiography is adequate in the majority of cases, but it gives us no idea of the gravity of the mucous membrane lesions, nor of the correct method of treatment to be adopted. It is common knowledge that the integrity of the ciliated epithelium is essential for the defence of the antrum of Highmore. Once this is compromised the cilia will be paralysed, there will be a diminution in the production of mucin and a progressive invasion of the micro-organisms of infection. The author contends that the method of "displacement" alone gives the required information. A number of cases are quoted in support of his arguments with full

## Tonsil and Pharynx

details of diagnosis and treatment. There are two essentials when dealing with an antritis: (1) The diagnosis that an antritis exists, (2) the distinction between those cases which will clear up with conservative measures, and those which require radical treatment. Whereas the first essential can be ascertained by the usual methods at our disposal, the latter can be ascertained only by the methods of "displacement". A considerable part of the article is devoted to the matter of treatment.

The author is not an apostle of repeated puncture lavages as a form of conservative treatment. He prefers Dahmer's method of turning down a flap of mucous membrane in the inferior meatus, making a breach in the bony wall and replacing the flap in the antral cavity. He does not, however, interfere with the inferior turbinate. The mucous membrane is not interfered with and the cavity is washed out on the fourth or fifth day with calcium gluconate. Finally, the author devotes considerable space to a description of a modified Caldwell-Luc operation. He advises the complete removal of all the mucous lining of the antral cavity relying on the healthy epithelialization of the cavity from the inferior meatal flap. Finally, he insists on the advantages of the internal administration of calcium in the form of calcium gluconate 8 grams daily by mouth.

A special paragraph is devoted to the treatment of sinusitis in children. The author draws attention to the undesirability of operating through the canine fossa before second dentition is complete. In all children below the age of 12 the nasal route should be selected. He points out how difficult puncture lavage is in children and describes his method of carrying out lavage after effecting an intranasal antrostomy by inserting a tube with a rubber disc through the aperture so that the tube can be left *in situ* and irrigation carried out through its lumen.

M. VLASTO.

### TONSIL AND PHARYNX

*Tonsil Infection of the Lower Group of Deep Cervical glands.*

ERICH RUTTIN (Vienna). (*Acta Oto-Laryngologica*, 1938, xxvi, 1.)

In tonsillitis and peritonsillitis as a rule the superior group of the deep cervical glands is swollen. But there exists another group of the deep cervical glands—the inferior group—situated in the lesser supraclavicular triangle, i.e., between the two insertions of the sterno cleido-mastoid muscle and the clavicle and situated usually behind the jugular vein.

In tonsillitis and peritonsillitis this group is less often involved than the superior group, but is liable to suppuration.



## Abstracts

Apparently on account of their position behind the jugular vein it does not appear to give rise to thrombosis of the vein with pyæmia. But thrombosis of the carotid artery is possible as shown in one of the cases. In such cases œdema of the larynx is rather frequent, as was seen in three out of four patients.

Of the four cases, three recovered after a simple incision, but the fourth mentioned above was admitted in a dying condition.

[Author's abstract.]

H. V. FORSTER.

*Cancer of the Pyriform Sinus.* LUIS EDUARDO REZZANO. (*Anales de Oto-rino-laryngologia del Uruguay*, January, 1938, vii, 3.)

In this lengthy paper, based upon a study of twenty-four cases of his own, the writer notes the difficulty of early diagnosis, the involvement of vital organs which cannot be completely excised and the early obstruction of the digestive and respiratory tracts. The symptomatology is discussed in detail.

The most valuable part of the paper is that which deals with treatment. All treatment by radiation should be preceded by the completest possible study of the topography of the tumour, in respect of area, volume and prolongations, making use of the data furnished by inspection, by touch, and especially by radiography, which in this case is a very valuable aid, as it shows not merely the surface of the tumour but also its extent within the tissues. It is on this "plastic conception of the tumour form" that the success of treatment rests; for, although it is true, in radio-therapy as in surgery, that one must go beyond the tumour, it must not be forgotten that normal tissues are also radio-sensitive, and just as a surgeon would not think of making too extensive an excision, so one must not overdo the irradiation. For this reason it is impossible to lay down a standard dosage and technique, and each tumour requires the dosage and the technique indicated by the results of topographical and geometric observations.

Those radiations should be used which have a maximum effect on the neoplastic tissues and a minimum effect on the normal tissues; hence the importance of an effective "filtration" of the radiations.

All treatment of the hypopharynx by radio-therapy should be preceded by a surgical cleansing of the mouth. This should not be carried to extremes but should be confined to the removal of any septic focus. In treating a lesion of the pyriform sinus, however much we may desire to confine the irradiation to this point, the mouth never escapes the effects; any dental sepsis will undermine the health of the patient, whose powers of resistance are weakened, and extractions during the height of the radio-therapeutic reaction naturally increase the risk.

## Tonsil and Pharynx

No treatment by radiation should be begun without a complete medical and laboratory examination of the patient and the treatment of any functional or organic disorders. The body must be capable of dealing with the flood of poisons which will be released when the neoplasm is dissolved by the radiations. One must remember the poor general condition of many of the patients and the fact that this is aggravated by radio-therapy, however carefully administered.

The injection of liver-extract assists in resisting the shock of radio-therapeutic treatment.

Teleradium therapy consists in utilizing the rays given out by a considerable quantity of radio-active substance placed at a distance from the tumour. The radio-active focus is kept away from the skin, thus protecting the latter, and at the same time allowing of a homogeneous irradiation. The greater the quantity of radium, the farther away from the skin can it be used, the more powerful will be its action underneath the skin : and herein lies the greatest drawback of the treatment—its high cost. To operate from a distance of 12 centimetres from the skin requires 5 or 6 grammes of radium.

As this is a method of treatment only recently introduced, we still lack statistics as to the treatment of cancer of the pyriform sinus, but we can place great hopes upon it, as gamma-rays seem to have a greater biological selectivity towards the cancer-cell than X-rays.

All the therapeutic methods which have been enumerated can be employed alone or in conjunction : for example, a radio-surgical technique is often advisable—the surgical extirpation of the glands, or even part of the tumour, followed by irradiation ; or inversely, radium treatment first, followed by the surgical extirpation of the remaining tissue. Although it is true that radiations reduce the vitality of the tissues and set up a fibrositis, thereby altering the conditions under which a surgical operation upon already irradiated tissues is carried out, the perfection of modern radiation technique makes possible this post-radio-therapeutic surgery.

Cancer of the pyriform sinus is a deceptive disease ; deceptive from the clinical point of view because of the impossibility of an early diagnosis of its latency, because of its obscurity, and because of the vagueness of its symptomatology ; deceptive also in its therapeutics, by reason of its inoperability, its resistance to radiation, the poor general condition of the patients, and the broncho-pulmonary complications which arise in the course of treatment.

At present we can only be sure of a palliative treatment of this disease. The great controversy between radio-therapy and surgery, which is so heated in the case of the larynx, has no place here except, as we have seen, in the case of glandular metastasis. The only

## Abstracts

weapon we have is radiation from which, up to now, we have not obtained very beneficial results. There was a glimpse of a fresh outlook with the use of radio-puncture by suspension laryngoscopy and, later, of high-tension roentgen-therapy ; but practical results have not justified the hopes placed in the first, while in the case of the second, the necessary installation is very expensive and the results have been disappointing.

When the quantity of radio-active substance available in the world is greater, a more general employment of telecurie-therapie with large quantities of radium will open to us a therapeutic field more fertile in results.

DOUGLAS GUTHRIE.

*A Case of Cylindroma of the Soft Palate.* FRITZ GENZ (Vienna).  
(*Acta Oto-Laryngologica*, January 1st-February 28th, xxvi, 1.)

The article refers to a case of cylindroma at first thought to be a carcinoma of the palate, the real nature of which only came to be recognized after clinical observation and unsuccessful X-ray therapy. A successful operation and a minute histological examination of the operation specimen confirmed the suspicions of its true nature.

The case clearly proves that a biopsy may prove to be unreliable, as in this case in which the tumour showed a varying histological structure.

[Author's abstract.]

H. V. FORSTER.

### MISCELLANEOUS

*Biological Polyvalency of Antigens with special reference to Hay Fever.*

J. FREEMAN and W. H. HUGHES. (*Lancet*, 1938, ii, 941.)

The authors state that the foreign grasses not grown to any extent in this country give positive skin reactions in people with hay fever who have not previously been exposed to them. They have found that maize- and bamboo-pollens cannot be distinguished antigenetically from English grass-pollens and that sugar-cane pollen behaves in the same way as English grass-pollen in the majority of cases. Between cane-sugar pollen and the others there is a slight antigenic difference, indicated by a minority of the cases which were desensitized with Timothy grass pollen losing their reaction more slowly. Three cases were found which were not sensitive to the cane-pollen, but which were definitely sensitive to Timothy pollen. A comparison between the pollen of the graminæ and pollen of garden flowers showed that such markedly exotic "grasses" as maize, bamboo, and sugar-cane are far more closely related to the English grasses antigenetically than to the English garden flowers.

MACLEOD YEARSLEY.

## Miscellaneous

*Diastolization in Catarrhal Conditions of Nose and Middle Ear in Children.* A. MILLER. (*Lancet*, 1938, ii, 943.)

The author makes no extravagant claims for diastolization, but considers it to be useful when treating hypertrophic rhinitis, catarrhal sinusitis, Eustachian and middle-ear catarrh with associated deafness, nasal insufficiency due to persistent mouth-breathing, and non-use of the nose. It stimulates the nerve-endings of the indolent nasal mucosa and re-educates nasal breathing, thus improving pulmonary respiration. In his view the stimulating effect produced by the air striking the nerve-endings of the mucosa should be added to the warming, purifying and moistening functions of the nose.

The author took up the treatment with scepticism, but now pleads for its more extended use. The apparatus figured looks ideal for carrying infection and very difficult to keep surgically clean.

MACLEOD YEARSLEY.

*A New Principle in the Treatment of Ozæna.* I. T. DOROCHENKO (Dnjeproströij). (*Acta Oto-Laryngologica*, November 1st-December 31st, 1937, xxv, 6.)

As we have at present no reliable remedy for the satisfactory cure of ozæna we must search for new therapeutic methods. To these belong treatment by Gravidan or Gravidol.

The treatment encourages the disappearance of the morbid condition by remedying the dysfunction of the endocrine system. At the same time the biological immunity of the patient is improved.

The harmlessness of this method, its curative effect and the simplicity of its use recommend it for the treatment of ozæna.

The success obtained by the treatment of ozæna patients with gravidol is to be ascribed not only to the hormones contained in the preparation, but also to the sensibilizing of other elements forming the compound.

[Translation of author's summary.]

H. V. FORSTER.

*The importance of Allergy in the Middle Ear from the experimental point of view.* P. P. SMIRNOV (Leningrad). (*Acta Oto-Laryngologica*, November 1st-December 31st, 1937, xxv, 6.)

The author has tried to provoke sensitization with histolysates obtained from tissues from mastoid processes. These attempts, however, in which the author used pepsine for the preparation of the histolysates, have not been successful. Through a hole pierced in the tympanum of the middle ear of guinea pigs previously sensitized with horse serum the author introduced this same serum and by these proceedings obtained a typical anaphylactic shock in the animals.

## Abstracts

He states that hæmolytic streptococci when introduced by means of endocardiac injection, were often found in the middle ear on the side where horse serum had been injected, but were absent on the side where only a control liquor had been introduced.

In another series of guinea pigs the author observed that sensitization could be obtained through the middle ear by subsequently provoking the anaphylactic shock by endocardiac injections.

[Author's summary.]

H. V. FORSTER.

*Experiences in the Production of Anaphylaxis in Animals by means of Bacteria and Histolysates from the Human Ear.*

P. P. SMIRNOV (Leningrad). (*Acta Oto-Laryngologica*, January 1st-February 28th, 1938, xxvi, 1.)

The author administered to guinea pigs (to produce sensitization) subcutaneous injections of an emulsion of dead staphylococcus aureus obtained from the pus of a patient's ear.

He found that subsequent endocardiac injections did not provoke any prophylactic shock in these animals, whereas re-injections later with extract of staphylococcus did give rise to typical shock.

[Author's abstract.]

H. V. FORSTER.