ABSTRACTS

EAR

Anomalies of the Cochlea in patients with normal hearing. L. M. POLVOGT and S. J. CROWE (Baltimore). (*Annals of O.R.L.*, 1937, xlvi, 579.)

Anomalies in the development of the cochlea have been found in seventeen temporal bones taken from patients on whom an otoscopic examination and functional tests with tuning forks and audiometer were made a short time before death. In none of the cases described was there any impairment of hearing as thus tested. The anomalies were :

(1) A dehiscence in the bony septum between the middle and apical turns (6 specimens). Four of these were unilateral, but the hearing was equal on the two sides.

(2) Arrested development of the bony structures in the apex of the modiolus (2 cases). Again the lesion was unilateral, the hearing equal on the two sides. The nerves supplying the apical turn were supported by fibrous bands.

(3) A defect on the right side of the bony wall in the middle turn of the cochlea with some fibres of the facial nerve actually passing through the spiral part of the ligament. This patient had bilateral " bell-like " tinnitus.

(4) Cochlea of two turns (1 case), and with three full turns (1 case).

(5) The scala vestibuli is much smaller than the scala tympani (1 case).

(6) Dehiscence in the bony wall of the osseous spiral lamina (2 cases).

(7) Vascular anomalies (2 cases). In one the vas spirale lies in the basilar membrane instead of on its under surface. In this case there was occasional tinnitus, although the lesion was unilateral. In the second case a blood vessel crossed the scala tympani with one branch attached to the basilar membrane.

The paper is illustrated with microphotographs demonstrating these abnormalities. GILROY GLASS.

Tests for the Hearing of Speech by deaf people. DENNIS B. FRY and PHYLLIS M. T. KERRIDGE. (*Lancet*, 1939, i, 106.)

This paper gives elaborate instructions for testing deafness by speech, which is, for practical purposes, far more valuable

than tests by watches, acoumeters and similar methods: apart, of course, from diagnostic tests by tuning forks, etc. The series of tests devised by the writers are designed for the comparison of the hearing of a person at different periods, such as with the speaker, the room, and the psychological condition of the patient. The new tests devised are of two types: lists of monosyllabic nouns, and short commonplace sentences. The first are for use for persons whose hearing is sufficient to allow them to understand isolated but common words; the second for those whose help from context must be considerable if they are to comprehend the meaning. Lists of these words and sentences are given. In testing, it is suggested that the speaker should be someone with whose voice the patient is familiar—that is to say, a relative rather than the doctor, and that it should be done in a quiet place at from 4 to 16 feet, depending upon the deafness of the patient. The patient should close the eyes to avoid lip-reading. The writers advocate the allotment of marks for the results of their tests, and precautions against guessing.

MACLEOD YEARSLEY.

What Audiometry can now mean in Routine Practice. ISAAC H. JONES and VERN O. KNUDSEN (Los Angeles). (*J. Amer. Med. Ass.*, August 13th, 1938, cxi, No. 7.)

In a lengthy article the authors criticize the otolaryngologist for his neglect of the hard of hearing patient. The careful study of such a patient should include the vestibular tests and audiometric tests with a standardized audiometer in a sound proof booth. The minimum standards for audiometers are enumerated and two figures show plans of small, inexpensive sound-proof booths.

Nine case reports are included to show the authors' methods of study and to put on record unusual cases, the understanding of which would have been difficult without precision measurements. The cases include chronic catarrhal otitis media, stapes fixation, either from otosclerosis or arthritis, neuroma of the VIIIth nerve, cerebral auditory defect and deafness from psychoneurosis.

With the old carbon type of hearing aid the physician could only advise patients to try out the various instruments on the market. But with the advent of high quality aids of the vacuum tube type audiometry and the prescribing of hearing aids takes on a new significance and the otolaryngologist can now measure the exact amount of hearing that each patient has both by air and by bone conduction. He can diagnose impaired hearing and determine whether any hearing aid should be recommended. With some exceptions the following will serve as a working rule: All patients who have a loss in excess of twenty-five decibels throughout the range of 256 to 4,096 cycles should have a hearing aid. If the loss

does not greatly exceed these limits a carbon type may be recommended, but if the loss is greater than fifty decibels a high quality vacuum tube should be prescribed. If the impairment is primarily conductive a bone conduction type of receiver is indicated; if it is primarily receptive an air conduction type. If conductive and perceptive impairments are approximately equal, choice should be based on a thorough test of both types. If the loss of hearing is largely perceptive and is much greater at high frequencies, a high type of vacuum tube with appropriate emphasis on the frequency is indicated. When a definite choice of instruments is not indicated by the audiometric tests recourse should be made to careful speech articulation tests. ANGUS A. CAMPBELL.

On the Mechanism of Transformation into Nystagmus on stimulation of the Semi-circular Canals. GÖSTA DOHLMAN (Lund). (*Acta Oto-Laryngologica*, September 1st-October 31st, 1938, xxvi, 5.)

The author describes his repetition of Steinhausen's experiments of injecting Indian ink into the semi-circular canals, in order to demonstrate in the ampulla the invisible barricade of the cupula. Photographs are included to illustrate these experiments and also others of models to show the displacement of a gelatinous formation in the shape of a cupula.

After a discussion on the theories of localization of the nerve centres governing the movements in nystagmus he proceeds to describe and to illustrate his experiments for determining the chronoxia of the vestibular nerve. The article concludes with the following summary:

"The results of electrical examination of the vestibular nerve are strongly in favour of the vestibulo-ocular reflex being a slowly reacting reflex system, which may serve as the origin of the slow phases. In all probability the stimulation is conducted through the nucleus triangularis and the nucleus of Bechterew. The rapid phase must be released in a rapidly reacting system, which is only secondarily, or by collaterals, connected with the primary vestibular nuclei. We have assumed that such a 'secondary' vestibular nucleus, which may on one hand transmit the corticofugal oculomotor impulses and on the other evoke the rapid phase in nystagmus, should be present in Deiter's nucleus and in cell-groups in the substantia reticularis." H. V. FORSTER.

Symptomless destruction of the Labyrinth in acute Middle-ear Suppuration. B. KECHT (Vienna). (*Monatsschrift für Ohrenheilkunde*, 1938, lxxii, 1137.)

The case is recorded of a nineteen-year-old airman suffering from acute otitis media and mastoiditis. At the end of the first

week of the disease he developed a diffuse purulent labyrinthitis with remarkable lack of symptoms. This quiet onset is accounted for by the fact that the labyrinth was not invaded by way of the semi-circular canals, but by pre-formed paths (e.g. the Haversian canals of the cochlear capsule) from the tympanum. Slow development of the disease also allowed time for defences to be built up.

A simple mastoidectomy was followed by labyrinthectomy when the latter procedure was indicated by lumbar puncture findings. Recovery ensued. DEREK BROWN KELLY.

Thrombosis of the Lateral Sinus. W. H. EVANS. (*Archives of Otolaryngology*, December 1938, xxviii, 6.)

This paper is based upon a questionnaire addressed to about a thousand otologists and hospitals in the United States of America, which elicited 343 replies dealing with a series of 1,556 cases of thrombosis of the lateral sinus, complicating 59,850 cases of mastoiditis. The average incidence was therefore 2·6 per cent. There is no statistical evidence that the incidence is influenced by climate. Bilateral involvement of the lateral sinuses appears to be extremely rare. The mortality reported in the present series was 31·2 per cent.

The " typical case " is very rare, each case presenting a separate problem. Less than half the cases have definite rigors and the variation of temperature may not exceed 2 or 3 degrees. Diagnosis should not be made without complete general examination, urin-analysis, blood count, blood culture and lumbar puncture. Choked disc is found in only 10 per cent. of cases, and does not add to the gravity of the prognosis. The most constant symptom is unilateral headache, with tenderness on pressure over the area drained by the mastoid emissary vein. Pulsation of the exposed sinus is an uncertain sign. The sinus does not normally pulsate, but it may do so when a broken-down thrombus is present. The Tobey-Ayer test gives correct information in 86 per cent. of cases.

There is great divergence of opinion in the matter of treatment. Despite the growing opposition to ligature of the jugular vein, the survey showed that the majority of otologists still favour the procedure.

On the other hand, some otologists hold that thrombosis is a protective process and that operation should merely provide drainage and that thrombectomy is not indicated when the thrombus is fixed.

There is also some controversy regarding the effect of transfusion, although it is almost universally employed. The effect of sulphanilamide is ill understood ; it must be used cautiously and its action should be carefully noted. DOUGLAS GUTHRIE.

Ear

Malignant Disease of the Ear. FRANK R. SPENCER. (*Archives of Otolaryngology*, December 1938, xxviii, 6.)

The writer reports a series of eight cases and reviews the literature. The average age was 63 years: seven were males and one female. In seven cases the disease was of squamous celled type, in one case of basal celled type. Carcinoma of the ear is a rare disease. During twenty-four years, Bezold saw only four cases out of 20,000 otological patients. In common with other forms of cancer, it has been more common in recent years. The mortality is high, but there is evidence to show that it could be reduced by earlier diagnosis. Surgical excision, followed by irradiation, offers the best hope of cure.

The eight cases are fully and clearly recorded, and the paper is illustrated by seven photomicrographs.

DOUGLAS GUTHRIE.

The Lop Ear. DONALD W. MACCOLLUM, M.D. (Boston). (*Jour. A.M.A.*, April 30th, 1938, cx, 18.)

The lop ear is caused by a congenital overgrowth of the conchal cartilage and a lack of the formation of the antihelix and scapha. The author bases the article on observations made on twenty-one cases of this rather rare malformation. All these patients had used mechanical appliances without benefit.

The three fundamental requisites for a satisfactory surgical repair are that:

1. The angle formed between the ear and the mastoid region must be reduced to at least thirty degrees.

2. The convolutions of the cartilages must be shaped to form an antihelix and scapha, both of which are absent in the lop ear.

3. The skin incision must be hidden behind the ear.

For purposes of orientation during operation the position of the planned antihelix is first marked off on the anterior surface with sterile Bonney's blue paint. Along this line, punctures are made through the entire ear with a needle carrying the paint so that the curvature of the new antihelix will be projected as a line of dots in the skin on the back of the auricle. These dots will then outline one side of an ellipse, the remainder of which is marked off so that one half of it lies on the posterior surface and the other half over the mastoid region. The ellipse of skin on the posterior surface is now removed. An incision is next made through the cartilage along the line of dots without buttonholing the skin on the anterior surface. A sickle or crescent shaped portion of this outer cartilage is removed and when a satisfactory correction has been obtained the two layers of cartilage are sutured to each other and both anchored as a layer to the post-auricular fascia of the scalp. Pressure must now be applied to prevent the formation of hæmatoma.

Two modifications are described, the first for the ear which curls forward beyond a right angle to the head and the second for the ear that is abnormally large in proportion to the other features.

The article is illustrated and has a bibliography.

ANGUS A. CAMPBELL.

NOSE

The distribution of Rhinoscleroma in Poland. T. ZALEWSKI. (*Polski Przeglad Oto-laryngologiczny*, 1938, xv, 12.)

Notification of scleroma was made compulsory in Poland in 1930, and during the six subsequent years (1930-6) 562 cases were notified. Women were more frequently affected than men, the proportion being 3 : 2. The age incidence in women was lower than in men, the greatest number of cases being found in women from 16 to 20 years and in men from 21 to 25 years. Scleroma is a rural disease ; 84 per cent. of the cases were country dwellers. Only 6 per cent. inhabited the cities and most of the city cases occurred in persons who had come from country districts. The majority of the cases were recorded from the south-east region of Poland. The disease is not found in the west.

DOUGLAS GUTHRIE.

Osteomas of the Paranasal Sinuses and the Mastoid Process. BERT E. HEMPSTEAD, M.D. (Rochester, Minn.). (*Jour. A.M.A.*, October 1st, 1938, cxi, 14.)

These bony tumours are uncommon and their ætiology has never been determined. They may be either very hard or spongy, or they may consist of a mixture of these two types. The patient usually presents himself because of pain, external deformity or symptoms of intracranial complications, although the growths may be found accidentally by X-ray. The writer feels that most osteomas with accompanying mucoceles can be removed through the fronto-ethmoid incision and that unless the dura or cribriform plate is involved the method of Cushing is illogical. If osteomas are associated with intracranial complications and with definite infections of the sinuses operation might be done in two stages.

Two cases are reported, one in the left ethmoid region and another in the left mastoid. Both of these cases did well following simple removal.

ANGUS A. CAMPBELL.

PHARYNX

A clinical investigation of the Plummer-Vinson Syndrome. RUDOLF LAUB (Vienna). (*Acta Otolaryngologica*, November 1st-December 31st, 1938, xxvi, 6.)

Based on the history of 236 patients received at the clinic because of carcinoma of the upper digestive tract. A careful

investigation was undertaken to find out whether a Plummer-Vinson syndrome had preceded the development of the disease. In most of the cases it was found impossible to prove this point either clinically or from the case history, and only in two cases could the syndrome be definitely diagnosed. Three such cases were reported without carcinoma. In all the author's cases of the Plummer-Vinson syndrome it is stated that hormonal disturbances had been observed.

[Author's abstract.] H. V. FORSTER.

Primary Ulcerated Infiltrative Tuberculosis of the Tonsils, Velum and Pharynx. MARTIN A. FURMAN, M.D. (New York). (*Annals of O.R.L.*, 1937, xlvi, 456.)

Diffuse infiltrative tuberculosis is distinguished from lupoid, acute miliary and latent forms.

The rarity of pharyngeal lesions, even when secondary to pulmonary tuberculosis is reported. An attempt is made to give a complete list of all primary cases in the literature.

A study is made of the modes of invasion of the body and the local defences of the pharyngeal tissues to resist invasion. The re-infection of the pharyngeal organs is discussed with regard to the exogenous and endogenous routes. And finally the mention is made of the ways by which, in primary infection, the local defences break down and ulceration ensues.

The difficulties of diagnosis are mentioned and a summary of the usual treatment follows.

A case is reported of primary infiltrative tuberculosis of the tonsils, velum and palate which was healed by the use of 50 per cent. trichloracetic acid.

[AUTHOR'S SUMMARY.]

LARYNX

Tuberculosis of the Larynx. A. DOBRZANSKI. (*Polski Przeglad Oto-laryngologiczny*, 1938, xv, 12.)

The majority of cases of laryngeal tuberculosis are in persons of 20 to 40 years of age; the disease is almost always secondary. Symptoms may be masked by those of pulmonary tuberculosis, but the most frequent are vocal fatigue, hoarseness, irritation, cough and dysphagia. The writer attaches little importance to radiological examination as a means of diagnosis of the chest lesion.

The results of treatment in 155 cases are noted, the methods employed being local irradiation by X-rays, galvano-cautery, instillation of antigens (Anti Tbc.) and artificial pneumothorax. Complete cure was obtained in 33 per cent. of the cases, improvement in 36 per cent.

One case of threatened asphyxia, in which the lung condition

was slight, underwent laryngofissure and was entirely cured. As a rule, tracheotomy aggravates the pulmonary condition. If the lesion of the lungs can be effectively treated by sanatorium treatment and by pneumothorax, the prognosis as regards the laryngeal lesion is favourable if suitable means of treatment are used.

DOUGLAS GUTHRIE.

A new method of Intubation. I. T. DORENCHENKO (Velikoie Zaporojie). (*Acta Oto-laryngologica*, November 1st-December 31st, 1938, xxvi, 6.)

Analysing the method of intubation described by O'Dwyer, the author of this work finds that in spite of its advantages compared with tracheotomy, intubation is not popular because of its chief fault, namely the difficulty found in inserting the laryngal tube—necessarily a blind manœuvre. To do away with this fault he proposes a new method of intubation under visual control. With this end in view he inserts a laryngeal mirror which is self retaining and of simple construction. The mirror is kept in position by means of a metal plate applied against the alveolar border of the upper maxilla. Then, having both hands free, the operator proceeds with the intubation under visual control. This new method is illustrated.

(Translation of Author's Abstract.) H. V. FORSTER.

The Mobility of the Arytenoid Cartilage in Paralysis of the Vocal Cords. J. JESCHEK. (*Arch. Ohr-, u.s.w. Heilk.*, cxlv, 315-21.)

An immobile cord usually means a fixed arytenoid cartilage. There are cases where slight movements of the arytenoid cartilage can be detected when the patient phonates. In a series of 80 cases with one vocal cord fixed, the author found 29 in which the arytenoid cartilage on the affected side showed slight movements. In these 29 patients the vocal cord paralysis had arisen after thyroidectomy or other neck operations and the onset of the nerve injury could be dated exactly. It was possible to follow-up one half of these cases over a maximum period of two years. Successive laryngeal examinations at definite intervals showed that the arytenoid cartilage becomes gradually fixed as time goes on. The average interval between the onset of the injury and fixation of the arytenoid cartilage was about six months.

J. A. KEEN.

Benign Tumours of the Larynx. GORDON B. NEW. (*Archives of Otolaryngology*, December 1938, xxviii, 6.)

This is a study of 722 cases observed at the Mayo Clinic during the past thirty years. During the same period, 1,100 malignant tumours of the larynx were seen. A classification based upon

histological appearances of the benign tumours showed that 329 were neoplastic, the commonest being papillomata (194 cases), while 393 were non-neoplastic, 332 being inflammatory.

Apart from papillomata the only true tumours were cases of myxoma, chondroma, fibroma, lipoma and adenoma. The tumour-like inflammatory growths were not easy to distinguish from true tumours. Cysts were found in 35 cases. Benign laryngeal tumours are commoner in men (70 per cent.) than in women (30 per cent.) and the age of incidence is usually 35 to 50 years.

In ten of the cases two or more distinct and different tumours existed in the same larynx. Of the 194 cases of papilloma, only 28 (all adults) had a single papilloma. There were 8 cases of chondroma, 25 of angioma and 58 of myxoma. Of the myxomata, few were true tumours; the majority were inflammatory. The site of predilection for benign laryngeal tumours of the larynx is the vocal cords in 92 per cent. of cases.

Symptoms may be absent (35 cases) but the most usual symptom is hoarseness (687 cases). Dyspnœa was present in 10 per cent. of cases of the series, usually cases of multiple papillomata. Cough, pain and sensation of fullness are less frequent symptoms. Diagnosis is effected by indirect laryngoscopy, but should be supplemented by a complete physical examination.

If an accessible benign growth is found, it is removed by suspension laryngoscopy and examined microscopically. The Lynch suspension apparatus gives an excellent view and leaves both hands of the operator free. When the tumour is large, preliminary tracheotomy may be necessary.

Microscopical diagnosis is essential as benign tumours do sometimes become malignant.

No single method of treatment is satisfactory for papilloma. Superficial avulsion, repeated if necessary, has the approval of Jackson. Roentgen therapy, in small doses, is favoured by some authorities, but radium is regarded as dangerous.

The writers of the present article employ diathermy coagulation almost exclusively. No scar has resulted and the voice is undisturbed. The growths on one side of the larynx are removed and only after this is healed is the opposite side treated.

Fibromata, even if large, can be removed under suspension laryngoscopy by surgical diathermy. A case of this nature is reported and illustrated. There were 8 cases of chondroma and they illustrate the value of X-ray examination, the extent of the tumour being clearly indicated. External operation was successful in 6 cases, 1 case did not return for treatment and in 1 case laryngectomy was required. For angiomata, radium offers the most satisfactory treatment. Myxomata are, as a rule, easily removed by forceps.

Abstracts

A detailed account is given of the inflammatory type of tumour (322 cases, of which 75 are men). The group includes fibrous nodules, polypoid tumours, pedunculated fibromata, papillary tumours, inflammatory thickenings (which often disappear spontaneously) and contact ulcer granulomata.

The paper occupies about seventy pages and is a comprehensive study of the subject. It is illustrated by thirty-seven excellent drawings and microphotographs and by eight tables. There are forty-eight references.

DOUGLAS GUTHRIE.

BRONCHUS

Tuberculoma of the Bronchus. ROBERT L. MOORHEAD, M.D. (Brooklyn). (*Annals of O.R.L.*, 1937, xlvi, 754.)

The patient, aged 17 months, had wheezing respiration for four weeks with slight cough. Bronchoscopy showed the right bronchus to be occluded by a mass of granulation tissue which was removed. The specimen proved to be tuberculous granulation tissue. The bronchoscopy had to be repeated one month later following which four deep X-ray treatments were given. After $2\frac{1}{2}$ years the child remains well.

GILROY GLASS.

ŒSOPHAGUS

The surgical indications in Perforations of the Œsophagus by Foreign Bodies. J. R. HEAD (Chicago). (*Amer. Jour. Surg.*, Oct. 1938, xlii, 1.)

Five cases of perforation of the œsophagus by a foreign body are reported, and the literature of the subject, which supplies sixty-seven other cases, is reviewed and classified.

Pointed objects are most apt to cause perforation and the site of inspection was most frequently the cervical œsophagus. Killian states that 90 per cent. of œsophageal foreign bodies are found in the cervical region.

The mortality is high—about 40 per cent. The writer had three recoveries and two deaths.

Increasingly painful deglutition, with fever, emphysema and swelling of the neck is the characteristic picture, and death may occur within forty-eight hours. Prophylactic mediastinotomy should be performed immediately in every case of suspected perforation of the cervical œsophagus. In perforation of the thoracic œsophagus, mediastinotomy, being a more formidable undertaking, may be postponed until signs of serious infection are observed. The value of postural drainage in the prone position with the foot of the bed elevated, is emphasized.

The paper is illustrated by six tables, and forty references are given.

DOUGLAS GUTHRIE.

Œsophagus

Mediastinal Infection from Œsophageal Perforation. CHARLES E. PHILLIPS, M.D. (Los Angeles). (*Jour. A.M.A.*, September 10th, 1938, cxi, 11.)

Œsophageal perforations occur for the most part in the upper portion, and from the constant motion of the mediastinal structures rapid dissemination of infection takes place.

As mediastinitis is frequently a fatal disease a prompt diagnosis should be made on the following points:

1. There is a history following the ingestion of some sharp substance or of perforation during instrumentation.

2. Immediate symptoms of pain, tenderness and dysphagia are followed by fever, swelling and subcutaneous emphysema.

3. X-ray examination may show a foreign body or irregularities of the soft tissues.

4. Endoscopic examination may show foreign body or gross perforation.

Infection in the retropharyngeal and superior mediastinal spaces is treated by a surgical approach through an incision along the anterior border of the sterno-cleido-mastoid muscle. When the infection is in the posterior mediastinum the surgical attack should be made from the dorsum by resecting two inches of the posterior end of the two ribs below the point of perforation. Dakin tubes with lateral openings are placed in the wound and irrigation done every two hours until the infection subsides.

Among over 5,000 œsophageal cases twenty cases of mediastinal infection occurred and are reported in detail. Seventeen of the cases recovered. None of the patients treated within twenty-four hours after perforation succumbed to infection.

The article is freely illustrated and has a bibliography.

ANGUS M. CAMPBELL.

Multiple Papilloma of the Œsophagus. WESTLEY M. HUNT, M.D. (New York). (*Annals of O.R.L.*, 1937, xlvi, 752.)

The patient, a woman aged 70, had stomach trouble for thirty years and had been taught to pass a stomach tube for gastric lavage. This she did for twenty-two years, but eight years previously the œsophagus became so ulcerated that she had to resort to a smaller tube.

When she came under observation she complained of pain in the stomach, burning sensation in the œsophagus and pain in the right shoulder. She expectorated blood after passing the tube, and could eat no solid food. Œsophagoscopy showed an ulcerated lower œsophagus and some varicosities with a moderately tight cardia. The following year a second œsophagoscopy showed a similar condition, although improved. A short œsophagoscopy five

years after the first showed multiple small tumours just above the cardia and just below the cricopharyngeus. Biopsy showed these to be papillomata.

GILROY GLASS.

MISCELLANEOUS

Crises of Ménière's Vertigo and Crises of Iritis with Œdema of Quincke in the Eyelids of the same patient. K. O. GRANSTROM and C. O. NYLÈN (Stockholm and Upsala). (*Acta Oto-laryngologica*, November 1st-December 31st, 1938, xxvi, 6.)

A woman of 56 had suffered for several years from often repeated attacks either of vertigo of Ménière's type or of Quincke's palpebral œdema, accompanied by brief disturbances resembling Iritis. These attacks are thought by the authors to represent an intra-ocular œdema of Quincke's type with Ménière's crises associated with a similar disturbance taking place in the labyrinth. All the patients' symptoms are therefore to be looked upon as of an allergic nature. It was nevertheless impossible to discover the actual cause.

(Translation of Author's abstract.) H. V. FORSTER.

The occurrence of so-called Myoblastomas in the mouth and upper air passages. PAUL FRENCKNER (Stockholm). (*Acta Oto-laryngologica*, November 1st-December 31st, 1938, xxvi, 6.)

In addition to a survey of cases of myoblastomas published earlier, a description of 5 cases is given, 2 of which have a very unusual localization, i.e. one in the trachea and the other in the plica aryepiglottica. Those two have been operated by the author and have not had any recurrence after the lapse of three years. In all the cases the microscopic picture agrees with that mentioned by Abrikosoff. The two cases from the trachea and the plica aryepiglottica, where normally there is no crosswise striated muscle tissue seem to confirm the opinion that at least sometimes the myoblastomas can arise from embryonic malformations. It looks as if the disease were not so rare as was formerly believed, as, within a few years, five cases have been discovered in a comparatively small number of patients.

(Author's Abstract.) H. V. FORSTER.