

## Abstracts.

### LARYNX.

**Avellis, G.** (Frankfort-on-Main).—*Case of not quite Sudden Death from Enlargement (Vicarious) of the Thymus, the Spleen being rudimentary.* "Archiv für Laryngologie und Rhinologie," Bd. VIII., Heft 1.

THE patient was a boy, four years old, very strong, and exceptionally well nourished, who was apparently in perfect health.

At seven o'clock he breakfasted heartily, and about ten his breathing suddenly became loud, groaning and stridulous, his face blue, and with slow, deep, and difficult inspirations he struggled for air.

The author saw him shortly after. There was no diphtheritic exudation in the pharynx; the intercostal spaces were retracted; the patient bent himself backwards during inspiration; the pulse was still perceptible. After about fifteen respirations he was dead.

Death was unaccompanied by convulsions, and took place within two hours of the onset of the difficulty in breathing.

At the post-mortem examination nothing abnormal was found in the brain; the lungs were free and only engorged; the intestines were healthy; no enlargement of bronchial glands; pharynx normal; larynx normal; vocal cords snowy white and not swollen; no œdema at entrance to larynx; no foreign body.

On the other hand, the thymus was enlarged and vascular. A smooth-walled cavity, as large as a cherry, with gray, viscous, pus-like contents, was found in its substance. The spleen was rudimentary, dark blue, as large as the thumb-nail, and from 3 to 4 mm. thick.

The other organs were healthy.

The author refers to our want of knowledge as to what may be regarded as the normal size of the thymus at different ages. Mettenheimer came to the conclusion that the weight of the thymus corresponded rather with the state of nutrition than with the age of the child. It is possible that in the above case the unusual size of the patient, together with the rudimentary condition of the spleen, accounted for the enlargement of the thymus.

It is known that some peculiar relations exist between the thymus and spleen. Friedleben held that the smaller the thymus becomes as age advances, the greater is the growth of the spleen. Schaffer also showed that there appeared to be a reciprocal relation between the spleen and thymus, so that when the one was rich in nucleated red blood corpuscles the other was poor.

The author therefore considers himself justified in regarding the enlargement of the thymus in the above case as functional and vicarious, to which the child's abnormal growth and very strong constitution perhaps predisposed him.

Had the above view of the case been taken in time, death might have been prevented by drawing out the thymus from the mediastinum and fixing it to the edges of the wound.

Investigations into the relations of the spleen to the thymus are not conclusive, for hitherto the condition of the bone-marrow has been disregarded.

As to the mode in which death is produced by an enlarged thymus—whether by stenosis of the trachea, or by pressure on the vessels or nerves—the author is unable to express an opinion, because the post-mortem examination of his case was not properly made. Instead of the thymus and trachea being cut transversely *in situ*, the usual method was adopted. It is just in consequence of this mistaken procedure that a large number of writers hold that there is no proof of a death having been caused by enlargement of the thymus. Weigert, however, has demonstrated a specimen in which a marked compression of the air-tract was caused by an enlarged thymus, and at least two other similar cases are now on record.

The size of the upper aperture of the chest is of importance in such cases. Pott has shown by anatomical measurements that the distance between the manubrium sterni and the vertebral column up to the second year is from 2 to 3 cm. In five out of ten cases reported by Pott, the thickness of the thymus even after death amounted to 2 cm.

The marked bending backwards of the head may also play a part. In this position the trachea can be completely closed by the thymus, which is squeezed between it and the sternum. If death took place under such circumstances, and the necropsy were performed in the usual manner, the cause of death would escape notice. The trachea ought to be opened in the neck and examined from above with artificial light, or transverse sections should be made through thymus and trachea, their relations to one another being undisturbed.

A. B. Kelly.

**Avellis, G.** (Frankfort-on-Main).—*What is the So-called Typical Inspiratory Stridor of Infants?* "Archiv für Laryngologie und Rhinologie," Bd. VIII., Heft 2.

In the course of the last two years the author has examined several infants suffering with the so-called inspiratory stridor. As a result of the study of these cases, he holds that the present generally accepted view as to the nature of this affection is incorrect.

The following case gives a clinical picture of the disease: A three-months-old child was brought to the author with loud croup-like respirations, but instead of suffering and being seriously ill, the infant was brisk and not at all oppressed. The pharynx was free; the epiglottis normal, and during inspiration motionless, while the arytenoids moved; a further view of the larynx was not obtainable. The intercostal spaces and the epigastrium retracted with inspiration; no fever; no hoarseness; pulse normal; no rickets; no craniotabes; no cyanosis; no enlarged glands; no retropharyngeal abscess. Fed well, although hindered by the stridor; steady increase in weight. No cough, no dulness over the sternum. Both parents young and healthy, and without tubercular taint.

According to the history given, fourteen days after birth the breathing became noisy. At night the inspiration was accompanied by a loud sound, and respiration was prolonged. Sometimes the noise was greater, so that the terrified parents lifted the infant out of bed. While sitting up, the difficulty in breathing was less than when lying. The noise had continued uninterruptedly for two and a half months; only the severity of the stridor varied. In spite of that, the child thrived, and took milk readily, although drinking often considerably increased the respiratory difficulty.

After observing the child for three weeks, during which bromide of

potash was given without producing any change in the condition above described, the author came to the conclusion that he had to deal with a disease (*sui generis*) which had been described by Thomson as "infantile respiratory spasm," and by Löri as "clonic spasm of the glottis of the newly-born and of infants."

McBride, Semon, Herzfeld, and Stumm have also seen such cases.

Löri found in the great majority of these cases that, when the inspiration was at its height, the vocal cords came quickly together, so that for an instant the glottis was closed, and that with the beginning of expiration the cords again separated. In two cases, on the contrary, a brief closure of the glottis occurred during expiration.

Semon considers that in all probability there is a constant irritation of the cortical laryngeal centres from causes as yet unknown.

Löri's observations do not explain the various features in the clinical picture. Nor is a condition which may persist for one or two years likely to be due to a neurosis, the irritation of the cortical laryngeal centres being so strictly localized that never for an instant does it affect a neighbouring centre, leading to convulsive movements of the face or extremities.

Quite recently Sutherland and Lack have dealt with this subject. The latter observed two cases of congenital laryngeal stridor which recovered after the second year. He found the epiglottis much compressed laterally, and the aryepiglottic folds with each inspiration flapped inwards. As the larynx developed, the symptoms disappeared, but the congenital form of the epiglottis persisted, in spite of the cessation of the stridor. The author therefore concludes that it was not the cause of the stridor, and that the sucking in of the aryepiglottic folds was secondary to a more deeply-seated stenosis, just as nasal obstruction may cause the indrawing of the *alæ* of the nose.

Bilateral paralysis of the abductors would better explain the constant inspiratory stridor without hoarseness. Two facts, however, oppose such a view: 1. According to Semon the disease has never been proved to occur in infants. 2. There is no discoverable reason why this disease almost always passes off after some months; for the great majority of all the cases known to the author have ended in perfect recovery; indeed, the spontaneous cure is so characteristic of the disease that treatment has been regarded as unnecessary by writers on the subject.

While these views were under the author's consideration, he saw a boy, aged four years, who in consequence of sudden, severe, intermittent stridor died. At the post-mortem, a large vascular thymus and rudimentary spleen were found, besides the usual appearances of engorgement. This case suggested the possibility of pressure of the thymus as the cause of inspiratory stridor in infants, and from this standpoint the author reviews four cases that he has observed.

The similarity of all these cases is unmistakable. In one the stridor was congenital; in another it set in on the fourteenth day; and in the two others about four weeks after birth. The children are not ill, but the stridor disturbs them while drinking, or if they are moved quickly. Sometimes the narrowing increases so as to cause cyanosis and slight suffocation. This condition has a distant resemblance to laryngeal spasm. No eclampsia or tetanic convulsions, no stage of apnoea, and no fit. Only a temporary increase in the narrowing of the air-tract, which does not cease suddenly with a deep inspiration followed by normal inaudible breathing, but passes off gradually into

the previous sound caused by the stenosis. Cough is quite absent unless bronchitis be a complication. The infants evince no anxiety, and the condition persists for months.

Neither his own observations nor the statements of others enable the author to determine whether the condition may exercise a prejudicial effect in after-life. Professor Moritz Schmidt has informed him, however, that in a lady aged twenty-five, who had suffered from inspiratory stridor when an infant, he found a narrowing of the trachea.

In order to explain the etiology of this affection, a case which was under Moritz Schmidt is described. The patient, a boy of two and a half years, had had for five weeks constant difficulty in breathing, with occasional attacks in which he became blue and anxiously gasped for breath. Laryngismus stridulus was diagnosed, and tracheotomy performed, but without benefit. Only on the introduction of a long cannula was the breathing relieved. Under the supposition that the trachea was compressed by some of the contents of the mediastinum, the latter was opened by Rehn, the thymus drawn forward and stitched to the fascia over the sternum. The cannula was then removed, and the child breathed easily. This case proves that the thymus can produce a chronic stridulous breathing in children.

Fritz König had a somewhat similar case. A boy, aged three months, in whom stridor had set in in the second week, was relieved by extirpation of a part of the thymus and the drawing forward of the remainder. The diagnosis of pressure by the thymus was strengthened by the presence of a soft swelling in the anterior part of the neck.

This condition is not now recognised for the first time. Allan Burns, at the beginning of the century, recommended as a last resort removal of the thymus when enlarged.

The author's opinion, that an enlarged thymus is the cause of the disease under consideration, is supported by Glöckler, who has seen three cases in which nothing but an enlarged thymus gland could be found as the cause of death from suffocation after prolonged dyspnoea. In one of these cases Weigert demonstrated that the trachea was compressed by the thymus.

The following facts favour the theory of stenosis of the trachea and bronchi by the thymus: 1. The age of the child. 2. The frequent spontaneous cure in the second year after having been present for several months. 3. That it may be congenital. 4. The manner in which cure takes place (stridor becomes again apparent on moving the child much). 5. The temporary cessation of stridor on changing the position of the body. 6. The absence of abnormality in the larynx. 7. The high position of the larynx. 8. The entry of air more freely into one bronchus than the other, so that the retraction of the chest and respiratory murmur are unequal on the two sides. 9. The result of operation.

If the stenosis were caused by enlarged bronchial glands, some of the following conditions would also be present: Pain at the level of the fourth dorsal vertebra; dulness between the shoulder-blades and on one or both sides over the sternum; irritable cough, persisting for a considerable time and resembling whooping-cough; the presence of glandular swellings; sometimes dysphagia; symptoms of engorgement; strumous and tubercular taint; occasionally hoarseness. The Roentgen

rays might also aid in differentiating. The two conditions may, however, occur together.

Thomson's descriptions, the cases operated upon by Rehn and König, and the author's own observations, dealt with children in whom there was no evidence of enlarged bronchial glands; the author therefore regards them as cases of thymic asthma, or, better termed, tracheostenosis thymica.

He has accordingly employed tablets of thymus gland and spleen substance. Small children can take half a tablet daily. Spontaneous cure usually sets in in from six to fourteen months, not by gradual diminution of the thymus, however, but by increased space in the thoracic cavity, and perhaps also by additional elasticity and power of resistance of the tracheal cartilages.

A. B. Kelly.

**Codd.**—*The Utility of Intubation of the Larynx.* "Birmingham Medical Review," August, 1898.

THIS is an interesting account of the author's modification of O'Dwyer's method. The operation is considered to be of much value.

B. T. Baron.

**Damieno, Dr. Anto.** (Naples).—*Angioneurotic Œdema of the Larynx.* "Archivi Italiani di Laringologia," July, 1898.

THE patient, a previously healthy man of sixty, with excellent personal and family history, while walking on the seashore suddenly felt his nose and eyelids swelling. In the course of twenty-four hours, notwithstanding treatment, the cheeks and neck had become greatly distended, the mucous membrane of the mouth and pharynx red and œdematous, the uvula "as large as a pigeon's egg," with a projection on the left side "as big as a cherry." Laryngoscopy was impossible, and the patient was obviously suffocating. The uvula was scarified, and an O'Dwyer's tube introduced, rendering a digital examination possible. The epiglottis and ary-epiglottic ligaments were enormously swollen, giving the sensation of touching a mass of *lumbrici*. In a few minutes a larger tube was substituted, but owing to the rapid subsidence of the œdema this was coughed up shortly after, and it was not necessary to replace it. The urgent symptoms had all disappeared within fifteen minutes after the introduction of the first tube.

Dr. Damieno claims that this was a case of that extremely rare affection œdema angioneuroticum, of which there is no account in laryngological literature save the description given by P. Strübing at the Berlin Congress in 1886. Massei recently reported a case in which all the symptoms pointed to this malady, but the patient had died before he reached him, the only morbid appearance remaining being "a slight swelling and pallor of the outer surface of the left arytenoid." Damieno considers that the absence of fever and pain, as well as of any morbid process in the larynx or adjacent parts, and especially the rapid course of the affection, exclude the idea of any infectious, constitutional, or mechanical cause. He therefore attributes the symptoms to vaso-motor disturbance, and, relying on the results of Ostroumoff's experiments, advances the theory of spasm of the *vaso-dilator nerves*. At the same time he confesses ignorance of the primary cause which can alter the vaso-motor conditions in a limited region so profoundly as to cause a rapid serous exudation, which, however innocuous pathologically, may become most grave and fatal from the site in which it develops.



Strübing, while declaring that scarifications are sufficient to remove the œdema, foresaw cases in which immediate tracheotomy might become necessary. This was in 1886, when O'Dwyer had but recently introduced intubation, and, in view of the great development of this procedure, its comparative simplicity and freedom from later pulmonary and general complications, Damieno thinks it is infinitely to be preferred to tracheotomy.

James Donellan.

**Hugel, Dr. K.**—*Treatment of Laryngismus.* "Münchener Medicinische Wochenschrift," No. 44, 1898.

In this paper Hugel wishes to draw attention to elongated uvula as a factor in the causation of laryngismus, and possibly also inspiratory stridor. Various authors have described cases where a hypertrophic or inflammatory enlarged uvula had produced spasm of the glottis, but in practice this cause has received little attention. He refers to a case where at the postmortem death was ascribed to an elongated uvula. In four cases where the uvula was amputated, slight attacks occurred afterwards for a short time and then disappeared. In a fifth case there were no attacks after operation. In this connection Mantle's paper ("British Medical Journal," 1890) is of interest. Enlargement may be congenital, due to œdema of the palate, the result of chronic catarrh, muscular paralysis, acute catarrhal or papilloma. Clinical appearances closely resembling congenital inspiratory stridor may also be produced by an elongated uvula.

Guild.

**Joal, Dr. (Mont Dore).**—*The Classification of Voices.* "Revue Hebdomadaire de Laryngologie," Nos. 20 and 21, 1898.

THE writer is of the opinion that the classification of the voice should not be undertaken exclusively by the teacher of singing, but to some extent in collaboration with the laryngologist. He points out how frequently errors of diagnosis on the part of the teacher occur, and quotes a number of cases in which a change of opinion as to the nature of the voice has had to be made, some having been observed by himself, and others narrated by various authors. Among these cases are many of artists of considerable celebrity, such as Jenny Lind, Mario, Sims Reeves, Faure, Mongini, Nicolini, Mierzinski, Jean de Reszkó.

He thinks that laryngoscopical examination can afford very important information in the majority of cases, and considers:

1. That the nature (*tessiture*) of the voice depends on the length of the vocal cords, and that those pupils who have the chest (thick) register, extending to a considerable height in the scale, have short cords with thin edges.

2. That the head (thin) register is easy and extensive in proportion as the cords are short and thin.

3. That the volume of the voice, with equal respiratory force, increases in proportion to the width and length of the vocal cords.

He goes on to describe the signs furnished by the examination of the larynx, the chest, and the resonating cavities by which the distinctive characters, as tenor, baritone, bass, soprano, mezzo-soprano, and contralto, may be recognised.

Given the same anatomical and physiological conditions, the same variety of voice is produced; but there are exceptions, although these are less frequent than has been generally admitted, and cases considered in the first instance to be exceptions, turn out eventually to be examples of mistaken diagnosis. The writer has only met with six

cases in which the voice has presented characters different from what the results of his examination would have led him to expect, and he counts his observations by hundreds. These instances occurred in a mezzo, and bass, and four baritones (who were transformed into robust tenors). Dr. Joal explains how these four, who were men of unusually powerful physique, were able to modify the quality and the nature of their voice.

(These remarkable observations will be read with great interest by all laryngologists, who will no doubt be led to concentrate their attention on this subject, but it will be with no light heart that they accept the additional responsibility thus thrust upon them.—*Abs.*)

*Dundas Grant.*

**Kelly, A. Brown** (Glasgow).—*Large Pulsating Vessels in the Pharynx.*  
"Glasgow Medical Journal," January, 1898.

FOUR cases are reported

CASE I.—A man, aged seventy-five, presented a large pulsating vessel projecting from the angle between the posterior and right lateral walls of the pharynx. It emerged from the posterior wall about the level of the upper border of the epiglottis, and ascended vertically, becoming gradually more prominent. When opposite the upper part of the tonsil, where its convexity was most marked and its pulsations best seen, it curved outwards and disappeared in the tissues at the side of the nasopharynx. It was fully as thick as a pencil, and extended laterally over a considerable part of the posterior wall of the pharynx. The mucous membrane covering it was normal. Pressure over the large vessels on the right side of the neck, above the level of the upper border of the thyroid cartilage, checked the pulsation in the pharynx. Nothing abnormal was detected in the condition of the walls of the vessel, nor in those of the temporal or radial arteries. There were no symptoms that could be attributed to its presence. The appearances remained unchanged during nine months.

CASE II.—A woman, aged seventy-five. A prominent vessel was found in her pharynx, somewhat smaller than that in the case just described, but otherwise the same as regards appearance and position. She had experienced no unusual sensations in the throat.

CASE III.—A man, aged seventy-two, presented a marked prominence on the posterior wall of his pharynx, somewhat resembling a post-pharyngeal abscess; the fact that it pulsated, however, indicated its true nature. This large vessel emerged from the left half of the posterior wall of the pharynx on a level with the attachment of the posterior pillar, and curved upwards and outwards, passing behind the upper part of the pillar. The pulsations were most marked on its convex part. It caused no symptoms.

CASE IV.—A woman, aged twenty-two. Very marked pulsation was seen behind both posterior faucial pillars. On the right side the vessel had much the same appearance as in Case I., the shelving projection extending half way to the middle line. On the left side it was less prominent, but the pulsations were as pronounced, and could be traced along the lateral wall of the pharynx for about an inch. The pulsations were not perceptible to the patient.

The cases on record in which a large vessel has projected into the pharynx are few. From these it is evident that this anomaly is found chiefly in the aged, especially in females, and that it gives rise to no subjective sensations in the throat. The appearance usually noted was

that of a pulsating vessel, as thick as a pencil, running in a vertical direction behind the posterior pillar of the fauces. It has been generally regarded as an enlarged ascending pharyngeal artery.

Two of the above cases were examined by palpation, and the pulsating vessel in the pharynx was found to correspond to the convexity of an abnormal bend of the internal carotid.

Dubruel and Barkow describe a tortuous condition of the internal carotid, and a specimen in the Glasgow University Museum presenting this abnormality was brought under the author's notice. In this, each artery ascends normally to within  $2\frac{1}{2}$  inches of the carotid canal, when its course tends slightly outwards. After running thus for over an inch it turns abruptly inwards and downwards, being thus doubled upon itself, and descends for an inch. It then bends sharply forwards and upwards, and ascends with a slight inclination outwards to the carotid canal, a distance of 2 inches. In consequence of this tortuosity, the artery approaches half an inch closer to the middle line than if it had followed the normal course.

It is evident that some, if not all, of the cases of "large pulsating vessels in the pharynx" are due to a tortuous condition of the internal carotids, for the prominent part of the lower bend in the specimen just described would produce an appearance in the living subject similar to that observed in Cases I., II., and IV. A. B. Kelly.

**Klaussner, Prof. F.** (München).—*Orthoform und "Orthoform neu."*  
"Münchener Medicinische Wochenschrift," No. 42, 1898.

THE new orthoform resembles closely in chemical composition the old orthoform. It is uniformly fine, whiter in colour, less cohesive, and cheaper. It may be used in a 10 to 20 per cent. mixture with starch, etc. It has been recommended in laryngeal ulceration; it does not have the disadvantages of cocaine. The anæsthesia produced lasts from eighteen to thirty-six hours. It is non-poisonous. Lichtwitz recommends orthoform in rhinorrhœa due to reflex irritation of the nasal mucous membrane, and especially in hay-fever. Its anæsthetic action is useful in Schleich's infiltration anæsthesia, and as an injection combined with arsenic in inoperable malignant disease. Guild.

**Linkenheld, Dr. L.** (Ems).—*Zwei Fälle von Kehlkopfschwindel (Ictus laryngis)*. "Deutsche Medicinische Wochenschrift," No. 41, 1898.

THIS paper is a lengthy description of two cases of laryngeal vertigo. The exciting cause appears to have been irritation of the pharynx by excessive use of tobacco, and irritation of the posterior laryngeal wall through the passage downwards of nasal mucus. Guild.

**Roemheld, Dr. L.** (Assistant).—*Impermeable Stricture of Œsophagus*.  
From the University Clinic at Heidelberg. "Münchener Medicinische Wochenschrift," No. 46.

PATIENT was a boy four years of age, who had acquired stricture of the œsophagus from swallowing caustic soda. The smallest bougie would not pass into the stomach; the constriction was situated 20 cm. from the teeth. Attempts to dilate by passing bougies from the mouth having failed owing to vomiting and restlessness of the patient, gastrostomy was performed by Professor Vierordt. Shortly thereafter a small bougie was passed into the stricture, and as the patient became accustomed to this treatment, a bougie was passed from below upwards



to the mouth. To its lower end a conical point was fixed; from day to day this was pulled further into the stricture, so that lasting dilatation was produced. After five months' treatment he was able to swallow minced meat. The gastrostomy wound was closed nine months later, and five months afterwards the child, who had been two and a half years in hospital, was dismissed cured. *Guild.*

**Rosenberg, A.** (Berlin).—*The Treatment of Laryngeal Papillomata in Children.* "Archiv für Laryngologie und Rhinologie," Bd. V.

IN the Berlin University Polyclinic for diseases of the throat and nose, 27,500 patients were treated in nine years; of these, 5,808 (3,052 boys and 2,756 girls) were under thirteen years of age. Amongst the 22,692 adults, 153 suffered from benign and 20 from malignant laryngeal growths (singers' nodules are left out of account); thus, 1 adult in every 131 had a tumour of the larynx. In the 808 children there were 16 cases of laryngeal papilloma (1 in 363).

Other observers confirm the comparative frequency of laryngeal papillomata in children. Massei writes that in 464 cases of laryngeal growths, a large proportion of these were papillomas, and that children were very often affected. Schrötter, in 56,498 patients, had 7,324 children under ten years; of these, 10 had benign growths, and of the adults, 220. From these statistics, laryngeal tumours occur almost thrice as frequently in adults as in children.

Of the author's 16 cases, 9 were boys and 7 were girls; the latter are therefore proportionately oftener affected. Causit, however, in 42 cases had twice as many boys as girls. Gerhardt gives a proportion of 1·7 to 1; and Rauffuss, 1·9 to 1. Taking all the reported cases, the author has collected 231. In 35 of these the sex is not mentioned; of the remaining 196, 108 were boys and 88 girls, giving a proportion of about 5 to 4.

The poor furnish relatively a larger contingent of patients than the better classes.

The author briefly reports 19 cases, including 3 in private practice, which he has treated.

In order to compare the relative value of thyrotomy with the endolaryngeal operation, the author has collected all the published cases and placed them in three groups according as they were treated by thyrotomy, tracheotomy, or by intralaryngeal means. A strict classification was not possible, however, as in some cases intralaryngeal operations had been followed by thyrotomy, and *vice versa*.

Altogether, 88 cases of laryngeal papillomata in children (under thirteen years) were treated by thyrotomy; of these, 37 were boys, 38 girls, and in 13 instances the sex was not mentioned. Seven were under two years; 38 between two and four years; 14 from four to six years; 8 from six to eight years; and 16 from eight to thirteen years. In 5 cases the age is not noted.

The result of the operation may be stated as follows: In 17 cases death from diphtheria, bronchitis, pneumonia, or suffocation (nearly always from recurrence of the papillomata); in 5 cases the result is not reported; in 34 cases, recurrence; in 32 cases, cure; in 6, with the voice affected; in 1, with the breathing disturbed; in 1, with necrosis of the cartilage; in 2, with a fistula; and in 3 the cure was only temporary.

Bruns comes to the same conclusion. Of his 21 cases, 3 died, 1 had to wear a tracheal cannula permanently, in 9 there was

recurrence, and in 8 a cure was noted, although strictly reckoned in only 4 was a perfect cure obtained.

In the author's table, 37 per cent. were cured; in Bruns's, 38 per cent. The author noted recurrence in 38.5 per cent.; Bruns, in 42.9 per cent. Death took place, according to the author's statistics, in 19.3 per cent.; according to Bruns', in 14 per cent.

The tracheotomy table contains 34 cases (16 boys, 10 girls). Four were under two years; 7 from two to four years; 11 from four to six years; 1 from six to eight years; and 4 from eight to thirteen years; in 7 the age is not stated.

Of these 34 patients 11 died; in 3 the result was doubtful; in 3 recurrence took place; in 1 a temporary cure and in 16 a permanent cure was obtained.

In the third table 48 cases (20 boys and 17 girls) are placed, which had been treated by intralaryngeal means. Of these, 2 were under two years; 7 from two to four years; 9 from four to six years; 8 from six to eight years; and 13 from eight to thirteen years.

Of these 48 cases 3 died; in 7 the result was doubtful; in 6, improvement; in 4, temporary cure; and in 27, cure.

In Bruns's table, which includes cases up to 1879, and of which the author's table forms a continuation, 40 cases are noted. Of these, none died; in 2 cases the result was doubtful; in 5, recurrence without cure; in 3, improvement; in 13, cure, with voice affected; in 17, perfect cure.

These statistics show that the percentage of cures is higher by intralaryngeal treatment than by thyrotomy. Further, they would lead one to adopt the following order of procedure in treating such cases: First, to try intralaryngeal means patiently so long as marked dyspnoea was absent; failing this, to perform tracheotomy, and then employ intralaryngeal treatment; and only in urgent and very severe cases to have recourse to thyrotomy.

The various kinds of intralaryngeal treatment by means of cutting forceps, caustics, intubation (including Lichtwitz's modification), and sponges are referred to; the snare receives special commendation. Autopsy is sometimes of undoubted assistance in these cases.

Instances are mentioned in which the growth has been coughed out, or disappeared either spontaneously, or after tracheotomy, or in consequence of the pressure of an intubation tube.

Thyrotomy ought to be performed only in exceptional cases; it is specially contraindicated in young children, for of those under four years of age operated upon the deaths exceeded the cures. Besides, in 42 per cent. there was recurrence. In children from four to eight years cure was obtained by thyrotomy in 50 per cent., and death occurred in 13.6 per cent.

On the other hand, intralaryngeal treatment in children under four resulted in cure in 50 per cent., while death took place in 22 per cent. From four to eight years the cures amounted to 70 per cent., with 1 death in 17 patients. Over eight years there was no death, and 50 per cent. of cures.

A. B. Kelly.

**Schrötter, Hermann v.** — *An Uncommon Indication for Endolaryngeal Operation.* "Wiener Klinische Wochenschrift," No. 40, 1898.

PATIENT was an unmarried clerk twenty-six years old, who had suffered for years from difficulty in breathing, especially on exertion. He had also a high-pitched voice. Laryngoscopic examination showed a smooth

tumour about the size of a hazel-nut, with a broad base springing from the left aryepiglottidean fold and the region of the left arytenoid, so that only the anterior third of the vocal cords can be seen. While the right aryepiglottidean fold shows no change, the anterior part of the left is attenuated with a thin edge and passes into the growth, which lies under the level of the laryngeal entrance; its mucous membrane is moist and pale, like that over the right arytenoid. It has the appearance as if the posterior part of the left aryepiglottidean fold, with Wrisberg's cartilage, and especially the mucous membrane over Santorini's and the arytenoid cartilage, were fallen inwards and downwards into the laryngeal lumen, and, in addition, as if a marked projection from the posterior surface of the left arytenoid reached towards the pharynx, and a ridge of soft, tense, curved mucous membrane from the interarytenoid sinus was drawn on to the middle part of the tumour. It was further observed that the growth was drawn inwards with a trembling movement by forced inspiration, and on phonation was forced laterally towards the left and its inner part slightly upwards by the inward movement of the right normally situated arytenoid. While the tumour obtained a passive change in position in this way by the movements of the healthy side, it appeared as if a hard structure was moved in its substance under the mucous membrane. The left side of the larynx remained immovable on phonation and inspiration.

The appearance described was diagnosed as left recurrent paralysis, and the tumour was thought to be due to a secondary change of position of Santorini's and the arytenoid cartilage and the aryepiglottidean fold. The history pointed to tubercular disease of a gland having caused injury to the recurrent nerve. The inward inclination of the arytenoid and the posterior part of the aryepiglottidean fold, frequently observed in one-sided recurrent paralysis which is caused by relaxation and atony of the ligamentous apparatus due to loss of muscular action, was extremely well marked in this case, where the paralysis had lasted for twenty years.

Removal was done with an electric snare under cocaine anæsthesia. Difficulty in breathing immediately disappeared. The snare had divided the syndesmosis between the arytenoid and Santorini's cartilage, and the latter with its covering of mucous membrane was removed. Hæmorrhage immediately after for two to three hours was hardly worth mentioning. The dyspnoea, unusual in the clinical symptoms of recurrent paralysis, dominated the appearances, and was satisfactorily removed by operation. *Guild.*

**N. v. Schrötter.**—*Case of Laryngocele Interna.* "K. K. Gesellsch. d. Aerzte in Wien. fau.," No. 21, 1898.

DEMONSTRATION of a child with laryngocele interna on the left side of the larynx; during the exspirium there is a tumour appearing similar to a cystic tumour caused through the inflated chorda vocal spur.

*R. Sachs.*

**Stamm, Dr. C.**—*On Congenital Laryngeal Stridor.* "Münchener Medicinische Wochenschrift," No. 38.

THE author refers to the literature on this subject, and describes the following case: Female child, five weeks old, healthy, apart from difficulty in breathing, which commenced after birth. Inspiration is accompanied by a peculiar stridor, expiration is free, respirations

30 per minute; although there is marked indrawing of the thorax, there is only slight, if any, cyanosis. Voice is loud, on crying dyspnoea is less. Pharynx and larynx, so far as visible, are normal. Over the upper third of the sternum there is considerable dulness, which might be caused by an enlarged thymus, but no effect is produced on the stridor by pressure here, or by holding the head in different positions. There is no engorgement of the vessels in the neck. The stridor persists in sleep and suckling. Phosphates combined with cod-liver oil were given; after two weeks marked improvement; in six weeks respiration was free.

The following points distinguish this affection from laryngismus. Congenital stridor begins immediately after birth, laryngismus with dentition; in the first there are no symptoms of rickets or tetany. Laryngismus occurs with more or less severe paroxysms, with cyanosis and convulsions; congenital stridor persists for weeks or months without cyanosis. Cessation of respiration does not occur in laryngeal stridor, and the stridor is less on crying, and is not affected by sleep.

As regards the etiology, although in this case there was dulness over the upper third of the sternum, the thymus could not be palpated in the jugular fossa; there was no obstruction to the blood or lymph circulation; pressure on the dull area or different positions of the head were without influence. He ascribes the condition to a central functional disturbance, a congenital arrest of development of certain centres of co-ordination, probably in the region of the *calamus scriptorius*, which, according to the researches of Semon and Horsley, is the centre for involuntary laryngeal movements. He also considers that the similar but transient stridor observed in children after chloroform is in favour of this view. He has also seen similar symptoms caused in an infant which fell on its head owing to a precipitate labour. *Guild.*

**Tilley, H.**—*Two Cases of Malignant Disease of the Vocal Cords: Thyrochondrotomy; Non-recurrence in One Case after Two Years.* "Brit. Med. Journ.," October 22, 1898.

IN the first case the patient, a man, aged sixty-five, consulted the author on account of hoarseness of from twelve to fourteen months' duration. On examination, the right vocal cord was found thickened, ulcerated, and immobile on phonation. There were no enlarged glands in the neck. The left cord and both vocal processes were normal. The diagnosis made was "epithelioma of the right cord." Operation was advised and was performed, a preliminary tracheotomy (low) being performed first of all. The thyroid cartilage was divided in the middle line, and also the upper three rings of the trachea. The diseased cord was in this way readily accessible. The mucosa was rendered as anæmic as possible by swabbing with a 10 per cent. solution of cocaine. The cord and adjacent mucous membrane, the right vocal process, and the right arytenoid cartilage, were at once removed. The interior of the larynx was now painted with Whitehead's solution. The patient made a good recovery, and is reported by the author as in all respects well and apparently cured two years after the operation.

The second case was that of a man, aged forty-nine, who applied at hospital complaining of hoarseness of two months' duration. Upon laryngoscopic examination, a whitish-gray nodular thickening, occupying the anterior fourth of the left cord, was seen. At its junction with the cord posteriorly, the latter was seen to be distinctly congested, and in marked contrast to the colour of the opposite cord. The affected

cord was almost completely immobile. A small portion of the growth was removed, and, under the microscope, was seen to be epitheliomatous in nature. Palpation of the larynx with the finger revealed the fact that the growth was hard and immobile. Operation was performed, as in the case previously described, and ended in rapid recovery.

The author remarks upon the necessity of a thorough laryngoscopic examination being made in all cases in which hoarseness persists, as this symptom may be the one and only symptom for a considerable period in cases of serious organic disease of the vocal apparatus.

W. Milligan.

**Ucke.**—*Demonstration of the Whooping-cough Bacillus.* "St. Petersburg. Med. Woch.," No. 7, 1898.

Boy, ten years old; four years ago had tussis convulsiva; one year ago scarlet fever. Now, very frequent attacks of coughing. In the sputum was found the same bacillus, which already Czaplewski, Neusel, and Kuplik had described as the characteristic bacillus of the tussis convulsiva.

R. Sachs.

**Weinberger.**—*On Therapia of Tussis Convulsiva.* "Wien. Klin. Rundsch.," No. 8, 1898.

THE author is a physician in Piotyàn, a watering-place in Hungaria. His four children had whooping-cough; as none of known remedies seemed to be useful, he tried on the children inhalations of the thermal waters in Piotyàn. The author maintains the children were cured through these inhalations, and recommends the Piotyàn water in cases of tussis convulsiva.

R. Sachs.

## E A R.

**Barrago-Ciarella.**—*A Symptom of Endomastoiditis with Empyema.* "Bolletino delle Malattie dell' Orecchio della Gola e del Naso," August-September, 1898.

THE author points out the great difficulty in the positive diagnosis of empyema of the mastoid in the absence of general and local symptoms. It was this absence of symptoms that drew from Schwartze the opinion that the diagnosis of empyema of the mastoid is made only after operation. In two-thirds of the cases operated on by Cozzolino in his clinic the procedure was justified by the condition disclosed by the operation, while the symptoms, both in their general and local aspects, failed to indicate surgical interference. Cozzolino in 1894 called attention to the speedy reappearance of pus in the tympanic cavity as the "unique symptom" of endomastoid suppuration, and in 1895-96 pointed out that the pus followed a definite course within the tympanum. Barrago-Ciarella now gives details of six cases in which "Cozzolino's symptom" was the only, but unailing, indication of pus in the mastoid, and claims that it furnishes a much-needed sign which is pathognomonic of this condition. He supports his contention by his clinical observations as well as by the results of a series of experiments on the cadaver and on the macerated temporal bone. Pus from the mastoid, in the absence of other symptoms, is distinguished from that due to suppura-