

irritation is not uncommonly the consequence not so much of the growths themselves as of the post-nasal catarrh, which rarely fails to be joined with them sooner or later; at any rate, by reducing the catarrh he has often succeeded in putting a stop to signs of nervous distress, although the adenoid overgrowth itself was in no way interfered with by the treatment. In the present case, however, treatment of the post-nasal catarrh did not affect the crowing, which only ceased after the post-nasal vegetations had been scraped away. *StClair Thomson.*

**Taylor.**—*A Case of Urticaria of the Pharynx producing Grave Œdema of the Glottis.* "Philadelphia Med. Journ.," April 2, 1898.

THE patient, a young lady, was seized with urgent dyspnoea after dinner, followed very rapidly by urticaria over almost the whole body. Counter irritation by heat to the feet, ice to the neck, a spray of cocaine and antipyrin gave great relief; also hypodermically strychnia, atropin, and later pilocarpin, and internally stimulants were administered. *B. J. Baron.*

## LARYNX.

**Barnett, J. E. S.**—*Case of Spasmodic Dyspnoea.* "The Lancet," April 30, 1898.

THE patient was aged three and a half months, and had suffered from obstructed respiration since soon after birth. Tracheotomy was performed, but the child died cyanosed three weeks afterwards. At the *post-mortem* it was found that the thymus gland was enlarged. It is suggested that this irritated the recurrent laryngeal nerves, setting up spasm, and that this was relieved by the tracheotomy: but the gland still growing caused direct and fatal pressure on the trachea. There was neither ulceration of the trachea nor papilloma of the larynx. *StClair Thomson.*

**Garre, Prof.** (Rostock).—*Extirpation of Larynx and Œsophagus.* Rostocker Aerzte Verein. "Münchener Med. Woch.," May 3, 1898.

1. THE author showed a man in good health after total excision of the larynx two years before. The specimen showed the larynx and attached muscles, as the growth had infiltrated through the thyroid cartilage.

Jan. 14th, 1896. High tracheotomy was done.

Feb. 10th, 1896. Total extirpation of the larynx.

2. He also showed a case of extirpation of the larynx, with part of the œsophagus. The specimen showed carcinoma of the œsophagus, which had infiltrated into the cricoid cartilage and extended to the arytenoids.

Dec. 6th, 1897. Low tracheotomy, with cocaine.

Dec. 18th. Thyrotomy for diagnosis. Piece of tissue between the arytenoids was removed and showed carcinoma of the œsophagus under an intact mucous membrane.

Jan. 7th, 1898. Total extirpation of larynx, with upper part of œsophagus. Part removed was five centimètres in length and included the whole lumen, except two centimètres of the posterior wall. The incision was carried half a centimètre from the tumour. The trachea was divided close to the cricoid and the upper ring removed. It was then closed by suture. Closure of the œsophagus was not possible. It was stitched to the surrounding soft parts, to be closed later by a plastic operation.

What is the danger of the operation, and what are the chances of recurrence? Statistics vary greatly. Sendziak has collected one hundred and eighty-eight cases of total extirpation, with a mortality of forty-four per cent. This does not give a

correct idea, as the operation has been improved lately. The greatest danger is from broncho-pneumonia, caused by blood, mucus, or saliva from the pharynx, or pus. The trachea must be carefully protected by isolating its lumen during the operation. Trendelenburg's or Hahn's canula should be used. In my second case, to prevent ingress of secretion I divided the first tracheal ring and sutured the now pliable trachea after freeing the peritracheal tissue. To preserve a clean wound round the trachea careful closure of the pharynx is necessary to prevent the overflow of saliva and mucus. Position of patient (Bardenheuer) is important, so that secretion may flow away from the upper parts of the throat. In the last few years, owing to improved technique, the mortality has decreased. Sixty cases of Bergmann, Mikulicz, and Socin show mortality of twenty per cent. Bergmann's mortality since 1891 is 11·1 per cent. As regards recurrence, Senlziak gives thirty-two per cent; relative cure—*i. e.*, under three years—seven per cent.; definite cure—over three years—5·8 per cent. Out of sixty cases in the last few years I find definite cure in ten per cent. Experience has shown us that not much importance is to be placed on small pieces of tissue removed for diagnosis. Intralaryngeal tumours always appear larger after removal than they do on laryngoscopic examination. When carcinoma is suspected, laryngo-fissure (a comparatively safe procedure) is indicated to allow of direct inspection, or palpation, or removal of a suitable piece of tissue for microscopic examination.

3. In a third case of cancer of the œsophagus, involving the posterior tracheal wall and cricoid cartilage, I was obliged to remove the otherwise healthy larynx. This operation consisted in resection of the œsophagus, five centimètres in length, with extirpation of the larynx and five upper tracheal rings.

*History.*—Woman, twenty-eight, has had difficulty in swallowing since September, 1897. After being confined in the end of September difficulty increased so that she could hardly swallow anything but fluids; no vomiting, no pain on swallowing, increasing emaciation. An obstruction was felt behind the larynx with the bougie—only the smallest urethral bougie could be passed. On palpation by pushing the larynx aside a slight resistance at the top of the œsophagus could be felt. Only a slightly swollen arytenoid could be seen with the laryngoscope.

*Diagnosis.*—Hard circular carcinoma of œsophagus.

Jan. 13th, 1898. (Esophagotomy on the left side: a small hard tumour can be felt. Sound No. 6 can be passed. Esophageal fistula made for nourishment.

Feb. 2nd, 1898. Resection of œsophagus, with extirpation of larynx and five trachea rings. Longitudinal incision on the anterior edge of the sterno-cleido mastoid. Large vessels drawn outwards; œsophagus freed from the vertebrae and separated from the pharynx. In attempting to separate the œsophagus from the trachea and cricoid cartilage it was found that the carcinoma had grown through the posterior tracheal wall for about five centimètres. The trachea had also to be removed. After a low tracheotomy the trachea was divided under the fourth ring, and after submucous removal of the fifth ring it was closed by suture close above the tracheotomy tube. The right lobe of the thyroid gland, which was affected, was also removed. As replacement of the continuity of the trachea with so large a defect is impossible, the larynx will be functionless. It was removed, leaving the mucous membrane in continuity with the epiglottis, which was used for plastic covering of the œsophageal defect. The mucous membrane over the arytenoid was united with the other edge of the resected pharynx, and the subglottic mucous membrane with the upper end of the œsophagus. This sac of mucous membrane was anteriorly in the middle line split up to the base of the epiglottis to simplify the wound conditions. The wound was plugged, especially above, to prevent ingress of saliva from the pharynx. The patient endured the

operation well. During the first eight days burrowing of pus in the mediastinum, with rise of temperature, occurred. It convalesced with proper position and frequent change of dressings. The sutures on the plastic laryngeal mucous membrane were torn through on the tenth day. The resulting defect, 2.3 centimètres, was covered with Thiersh's grafts. After eight weeks there was a deep œsophageal channel, almost entirely covered with mucous membrane, which, on March 30th, could be closed as a tube with two small flaps, over which the skin could be sutured. Only a small fistula was left open.

April 4th. Patient swallows well: only a few drops escape by the fistula.

In the specimen which I show is only the bare cartilaginous framework of the larynx; the healthy mucous membrane from the aryepiglottidean ligament to the trachea mucous membrane I preserved, to close by a plastic operation the defect in the œsophagus, which, as far as I know, has not been attempted before. Owing to the unpleasant susceptibility of the transplanted laryngeal mucous membrane (the superior laryngeal nerve was not injured) it was a long time questionable whether this could be used for œsophageal mucous membrane, and if severe coughing would not interfere with nourishment. That was not confirmed. The sound still produces coughing; swallowing is normal.

Œsophagoplasty presents many difficulties in a total cross resection of the œsophagus. Hacker, in one case, formed a posterior œsophageal wall by folding in two lateral flaps. The patient survived a few hours. Paulsen had a favourable result in a similar case ("Centralblatt für Chir.," 1891). Narath, in a resection of four centimètres, managed to make the œsophagus so movable that he could draw it up and suture it to the pharynx by its posterior wall, which resulted in a channel, which was converted into a tube by a second plastic operation, and functionally gave a satisfactory result. Narath describes this as the second œsophagoplasty treated to an end. In my case it was absolutely impossible to draw the œsophagus far enough up to unite it to the pharynx, owing to its want of mobility and the size of the excised part.

As the larynx, after resection of five tracheal rings, and the cricoid cartilage, would doubtless be functionless, I wished to make the attempt to use plastically the laryngeal mucous membrane. This mucous membrane was so vascular and so perfectly preserved, as the final result shows, that it was of the greatest use in the formation of an œsophagus. Somewhat easier is the œsophagoplasty in those cases in which, as in Case 2, a small piece of the posterior wall can be preserved. Here, after a half-channel had been formed by cicatrization, I completed the œsophagoplasty by using skin from the neck, like Hochenegg ("Wien. Klin. Woch.," 1892) and Narath. Two folding flaps were on either side dissected up, turned with the epidermis inwards, and sutured by their edges. Thus two lateral skin flaps formed the covering, which could be pushed on their substratum to the middle. I left the lower corner open, in order to feed with an œsophageal tube. Healing followed in a satisfactory way, but the outlook for a lasting result has been disturbed by the occurrence of a secondary deposit from a gland which has affected the carotid. *Guild.*

**Harmer, L.**—*Case of Primary Cancer of the Epiglottis and its Operative Treatment.* "Munch. Med. Woch.," April 19, 1898.

WHILE cancer of the larynx is common, cancer of the epiglottis is rare. Patient, sixty-five years old, presented a cauliflower-like tumour the size of a hazel nut growing from the edge of the epiglottis and the right aryepiglottidean fold. Operation undertaken with dependent head without previous tracheotomy.

Subhyoid pharyngotomy with excision of tumour and surrounding tissue.

Result was favourable. If after the operation there is obstruction to secretion, the foot of the bed should be raised, as recommended by Bardenheuer, which has a quick and favourable effect on accompanying bronchitis. *Guild.*

**Longbotham, George F.**—*Plugging of Trachea by a Caseous Gland.* “The Lancet,” March 19, 1898.

A BOY, aged eight, was admitted to hospital in a semi-conscious, cyanosed condition, evidently suffering from some obstruction to his respiration. There was no history of foreign body getting into the air passages. Chloroform was administered, giving some relief. Intubation with a catheter did not benefit the symptoms, but evidently indicated some obstruction a considerable way down the windpipe. Tracheotomy was then performed, but before its completion the child had ceased breathing. Aspiration with a long india-rubber tube was then tried, but yielded no good result. A long tube was then passed down for the purpose of irritating the mucous membrane of the trachea and bronchi, whereupon the child gave a deep inspiration, and again ceased breathing. The heart beats were now becoming smaller and much more rapid, but artificial respiration, the galvanic battery, and this catheterization were nevertheless continued. Suddenly some cheesy-looking matter, about half the size of a hazel nut, was coughed up, after which the child began to breathe freely, and made an uninterrupted recovery, although on more than one subsequent occasion a little of this cheesy matter was coughed up. This cheesy matter proved to be part of a caseous bronchial gland, which had evidently ulcerated its way into the trachea, about the bifurcation. *St Clair Thomson.*

---

## ŒSOPHAGUS.

---

**Bayer, Dr.**—*Eucaine in Affections of the Œsophagus.* “Therap. Monats.,” April, 1898.

IN 1896, eucaine, a new anæsthetic made in the chemical works in Schering, was recommended as a substitute for cocaine by Gaetano Vinci, working under Liebreich in the Berlin Pharmacological Institute. Vinci proved, from animal experiments, that it had the same anæsthetic effects as cocaine, could be sterilized by boiling, was applicable in weaker solutions, and cheaper. Favourable reports, with a few exceptions, immediately followed from ophthalmic surgeons and dentists. The dissentients stated that the irritation of the conjunctiva and the pain on instillation were sufficient to condemn the drug. Silex, who had been in favour of it, undertook investigation, which showed the discrepancy to be due to inconstancy of action. To prevent this, a new preparation, eucaine B, was introduced. An immediate anæsthetic action, with little irritation or toxicity, was ascribed to this eucaine B. It was promptly introduced into surgery with good results, as Lohmann showed, who, after he gave up the three per cent. solution, performed a series of smaller and larger operations painlessly with a ten per cent. solution. Schleich was satisfied with it in infiltration anæsthesia.

Experiments with eucaine A and B have been made in affections of the œsophagus and rectum in the polyclinic and private practice of Prof. Rosenheim for over a year (at first with A, for the past nine months with B). No essential difference was noticed. I have been allowed to report these. Eucaine was used in a three per cent. solution for œsophagoscopy. After two minutes anæsthesia was sufficient, and lasted long enough for thorough examination or slight treatment, as cauterizing