

Levy (R.)

TWO CASES OF LARYNGEAL
NEOPLASMS.

INDEX
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Read in the Section on Laryngology and Otology, at the Forty-fourth
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TWO CASES OF LARYNGEAL NEOPLASMS.

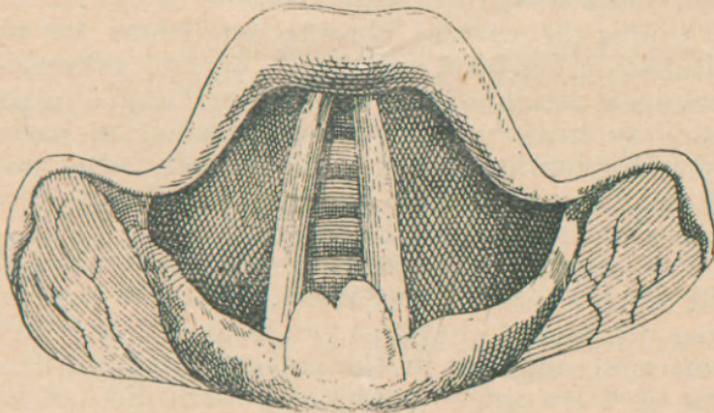
The following cases are reported, not with the view of adding anything new to the already extensive laryngeal literature, but for the purpose of placing on record two interesting cases:

Case 1.—A. K., female, age 21 months, was brought to my office Aug. 22, 1892, having been referred to me by Dr. Blickensderfer of Denver. The child presented all the evidences of laryngeal dyspnea with marked stridor and especial embarrassment in inspiration. The voice was aphonic and there was a slight cough. The general condition of the child was bad; her appetite was poor; she was anemic, weak, with a rapid, small pulse. The following history was obtained: at birth the little one required resuscitating, which was accomplished in about one hour with great difficulty. After this, the voice and respiration were good until at the age of about 8 months when, with the beginning of dentition there developed some difficulty in breathing, lasting until the first tooth appeared. At the same time the voice was lost but was soon restored, although imperfectly. At the age of 13 months there was a return of the dyspnea, at which time the attack was worse than before and lasted about one week. The voice was now left less clear, and from that time gradually became aphonic. At the age of 16 months another and very severe attack occurred, which was termed by attending physicians "croup," this being the first diagnosis ever made in the case. The child never fully recovered from this attack, but was left completely aphonic, with more or less difficulty in breathing at all times, the dyspnea being frequently exacerbated and often associated with fainting spells. The case had been seen by many physicians in Iowa, and the diagnosis of asthma often made. A change of residence to Colorado was ordered.

The evidences of laryngeal obstruction being clear, a laryngoscopic examination was attempted but, notwithstanding the greatest perseverance, could not be accomplished. A digital examination was also unsuccessful in determining the nature of the case. Tonic and anti-spasmodic treatment was instituted, with a view to gain more time and attempt subsequent examinations. Three days later, at

midnight, a hasty summons took me to the little one whom I found cyanotic and rapidly suffocating. The case had appeared to be one of either laryngeal paralysis or papilloma. I had previously decided to intubate in either case. This was easily accomplished with the smallest tube and the relief immediate and grateful. August 29, four days later, the tube was coughed out, its re-insertion, however, being demanded the following day. At intervals of three days the tube was expelled and re-inserted. September 11, the next size tube was placed in the larynx and remained in situ until November 28, a period of sixty-eight days, during which time the child gained in weight, ate well without the slightest difficulty and improved remarkably. The tube was now removed but its removal was followed by immediate and alarming apnea. Artificial respiration and stimulation resuscitated the child in about twenty minutes, and the breathing became quite easy. The following day, however, surgical interference was urgently called for and the same tube placed in the larynx. March 20, 1893, the child was found suffering great dyspnea, the attack having come on gradually with several remissions, during the previous three days. The intubation tube was found in situ and evidently unobstructed from the fact of free expiration. It had been in place 111 days without removal. Tracheotomy was earnestly advised, but not acceded to by the mother until the child was unconscious, when it was rapidly performed, not without a good deal of hemorrhage, however. The tracheal opening was held open by a silk thread until a canula could be obtained, the operation having been demanded without loss of time. Following the tracheotomy the respirations became more tranquil but the dyspnea was not entirely relieved. On inserting the tracheal tube the breathing became more embarrassed and remained so despite the prompt removal of the canula. A digital examination revealed the fact that the intubation tube which had been allowed to remain in the larynx had disappeared, probably into the trachea. A pair of McKenzie's laryngeal forceps passed into the trachea came into contact with the lost tube and its withdrawal was at once followed by complete relief. During the operation and examination for the cause of the dyspnea, the presence of soft irregular growths was determined by the finger. These appeared to occupy a considerable portion of the larynx, both above and below the vocal bands. No attempt was made at their removal, owing to the low condition of the patient from loss of blood and the continuous dyspnea. With the exception of great weakness and several severe convulsions, during one of which the respiratory muscles seemed fixed, the patient made a good recovery and is now gaining rapidly in point of general health.

The patient is now but little over two years old. The question of performing laryngotomy and removing the neoplasms, or waiting for an opportunity to perform an intra-laryngeal operation, or for the not impossible spontaneous expulsion of the growths, is an important and interesting one. The dangerous consequences of thyrotomy, both as to the life and subsequent voice of the patient, have been well considered. Intra-laryngeal removal can successfully be accomplished at a very early age, Rice¹ having performed it at five years and Hovell² at three and one-half years, this being probably the youngest on record, while the case of Boylan's³ at ten years is an example of what can be done by a few years of waiting.



Extreme Abduction.

That spontaneous cure of papillomata is quite possible, is illustrated by the case of Major,⁴ in which a quantity of the growths was expectorated, and the cases of Hunter McKenzie,⁵ Eliasberg,⁶ Oertel,⁷ Lowman,⁸ White⁹ and Garel.¹⁰ Massei¹¹ shows that many papillomata may disappear because of their being more properly granulomata. Browne,¹² by enjoining absolute silence and applying cold prevented recurrence, while Eliasberg believes the removal of the respiratory process from the larynx withdraws certain irritant factors.

It is interesting to note the results of treatment for papillomata by intubation, and incidentally the use of this method in other conditions besides croup and diphtheria, as well as the length of time a tube may remain in the larynx without doing any harm. Seifferts¹³ reports a case in which intubation was done after thyrotomy for papillomata. Massei¹⁴ used it in one case; Lichtwitz¹⁵ recommends a fenestrated tube to assist in intra-laryngeal treatment of these growths and other conditions. Petersen¹⁶ shows failure in one case treated by intubation. Waxham¹⁷ reported an interesting case before this Section at its last meeting, at which time Thrasher¹⁷ also showed the value of intubation in papillomata. The case reported by C. H. Knight,¹⁸ and that of Raynor's,¹⁹ are also noteworthy in this connection.

Among the various chronic conditions for which intubation has been mentioned, we find ankylosis of laryngeal articulations from cancer,²⁰ abductor paralysis,²¹ syphilis,²² sub-glottic neoplasms,²³ to assist in removing foreign bodies,²⁴ tuberculosis,²⁵ after tracheotomy,²⁶ stenosis following diphtheria²⁷ and stenosis following fracture of the larynx.²⁸

The length of time an intubation tube may, without doing serious if any harm, remain in the larynx does not seem to have, as yet, been settled. In fact continual surprises in this respect confront us. In one of O'Dwyer's²⁹ cases the patient did not suffer from retention of the tube for a period of ten months and four days. The case of Waxham's¹⁷ already quoted, retained the tube four years; Schmiegelow's,²⁶ one year; Dillon Brown's,²⁷ nine months; C. H. Knight's, three months; Brother's,³⁰ fifty-eight days; McCurdy's,³¹ forty days. In most of these cases the tube was removed every month or two, Dr. O'Dwyer's, however, remaining continuously ten months and four days. In the case here reported, the tube was retained continuously for sixty-eight days, then removed for twelve hours and again retained for 111 days, a total of six months and twenty-three days.

Feeding was normally performed after a few days' retention, and there was absolutely no discomfort notwithstanding several attacks of colds and coughs.

The noteworthy points here are: 1, the occurrence of a growth, probably not congenital, in a child 8 months old; 2, the apparently negative result from treatment by intubation; 3, the length of time the tube was continuously retained without any discomfort.

Case 2.—G. L., male, age 16 years, was referred to the Department of Laryngology at Gross Medical College, Feb. 26, 1891, by Drs. Bull and Butler of Grand Junction, Col. The following history was obtained:

His occupation was that of a farmer. His health up to the present illness had always been perfect. His family history revealed nothing of importance. Early in the winter he had had an attack of typhoid fever which had lasted about nine weeks. During the last three weeks of his illness his voice was hoarse and there was slight difficulty in breathing, but no pain except upon coughing. Soon after his convalescence there developed some dysphagia upon taking liquids, a slight cough; followed by occasional sharp and sudden pains, loss of weight and rapidly progressing weakness.

A week previous to his arrival in Denver he had an attack of la grippe, since which all symptoms have been greatly exaggerated, more particularly the difficulty in respiration, which upon the slightest exertion causes the patient great suffering.

Upon examination the boy presents an anemic, almost cachectic look, marked dyspnea with decided stridor which is constant. His voice is dysphonic and his cough gives forth a loud barking sound; pulse 140; temperature $97\frac{1}{2}$ degrees F. at 3 p.m. The laryngoscope shows both vocal bands red and near the median line. The left is visible in its entire length; the right is covered at its posterior attachment by a small, light red, lobulated, smooth growth, the lobulation dividing its surface into two unequal parts. Upon phonation the growth is partly in the chink of the glottis, and upon forcible inspiration the vocal bands are but slightly abducted. They are not completely fixed but can be separated about one-fourth inch, during which time the tumor fills up the posterior portion of the chink. The left vocal band seems slightly less movable than the right, notwithstanding the position of the tumor. The diagnosis of partial bilateral posticus paralysis with some form of laryngeal tumor, probably fibroid, was easily made. Without prelim-

inary training, but under cocain anesthesia, an attempt was at once made, with a McKenzie antero-posterior forceps to remove the tumor, which under the existing paralytic condition seemed responsible for much of the dyspnea, despite its small size, it being about as large as a green pea. The first effort was unsuccessful and brought on at once a severe spasm of dyspnea. Before making another trial, preparations were made for a possible tracheotomy. This, fortunately, was unnecessary, as about three-fourths of the growth was removed without any difficulty, the result being immediate relief to the breathing. The stridor still persisted but was less marked. The following day the remaining portion was readily and thoroughly removed and the patient was at once placed upon a tonic of iron, quinin and strychnin with the faradic current applied to his larynx, both internally and externally. After two weeks' treatment the patient returned to his home greatly improved, but still showing considerable dyspnea on exertion. The cough and pain had disappeared, the voice was clear only at times, being less so in the morning. A letter dated May 12, 1891, informs me that he is not yet able to work on account of short breath. Another letter, Nov. 17, 1891, tells me that he has had electricity applied to the larynx externally until July and has faithfully taken his tonic. His breathing is better, he can do light work, his voice is nearly normal. A letter received April 15, 1893, shows the patient to be in perfect health, voice and respiration unimpaired.

The larger portion of the tumor was frozen, sections made, stained and examined by Dr. A. S. Lobingier, then Professor of Histology and Pathology in Gross Medical College, and pronounced by him a spindle-celled sarcoma.

The cause of abductor paralysis is always an interesting though uncertain subject. In this case it can be considered that, the larynx being involved in the typhoid fever, there was set up a peripheral neuritis, as mentioned by Tissier³² and others. Whether we accept the proclivity theory of Simon or not, the fact remains that abductor paralysis follows central lesions, as well as lesions in the course of the inferior laryngeal nerve. Local disturbances also play an important part in the etiology, for cases due to myopathic cause, to rheumatism, to localized pressure, are not rare. Among the most interesting causes might be mentioned hysteria, as reported in the case of West's³³ and Bandler's,³⁴ and

reflex disturbances from nasal and post-nasal troubles, as in Stewart's³⁵ and Robertson's³⁶ cases.

In regard to sarcomata, these are not of frequent occurrence in the larynx. Bosworth³⁷ collects forty-seven cases; additional cases are reported by Wright,³⁸ Browne,³⁹ Scheinmann,⁴⁰ Lentiagne,⁴¹ Toeplitz,⁴² Hjorth,⁴³ Cutter,⁴⁴ Schnitzler-Frisch,⁴⁵ Bissell-Hagen⁴⁶; and while they occur early in life, more frequently than do carcinomata, there are but a few cases on record under 20 years of age. Bosworth³⁷ records the case of Caselli at 19 years, Browne³⁹ one at 9 years, Carlos Labus⁴⁷ one at 13 years, forming, with the one here reported at 16 years, four under 20 years of age.

The intra-laryngeal method of removal is quite universally condemned, although the cases of Scheinmann, Toeplitz and Labus were thus cured.

The points of special interest in this case are: 1, the rare combination of paralysis and sarcoma, only one other case, by Cohen,⁴⁸ of paralysis and tumor being recorded; 2, the cause of the abductor paralysis; 3, the occurrence of a rare form of laryngeal neoplasm; 4, the age of the patient; 5, the apparent cure, after two years, by the intra-laryngeal method.

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