

ous disturbance is of course difficult, but the inferences which I have drawn appear to me to be logical.

In considering the question of trophic disturbances in their relation to destructive syphilitic processes, it is well to remember the familiar physiological experiment of section of the sympathetic in the neck of the rabbit. The same experiment is also interesting as bearing upon the faucial congestion of early syphilis. The reddening of the ear of the rabbit, the inflammation and sloughing of the cornea incidental to section of the sympathetic, are certainly suggestive. To carry the analogy of this physiological demonstration a little further, I would call attention to the serious corneal trouble which sometimes results from herpes frontalis seu orbicularis.

The tropho-neurotic influence of syphilis appears to be chiefly manifested in the peripheral structures of the body. Thus, in late syphilis we have a tendency to brittleness and other morbid changes of the finger and toe nails. There is falling of the hair, due to intrinsic perversion of vitality of the hair follicle, and differing from the alopecia areata of the early stages of the disease. The most important evidences of the tropho-neurotic influence of syphilis is the malnutrition of the teeth observed in syphilitic children. In my opinion syphilis may impress several generations of individuals with a tendency to tropho-neurotic changes of the glands, teeth, nails, etc., long after syphilis *per se* has been eradicated. It is my opinion that scrofula is frequently the result of this neurotic tendency, *i. e.*, tropho-neurotic disturbance.

In a paper read before this Section at the meeting of the American Medical Association, June 12, 1886, I directed attention to the close similarity which exists between so-called canker of the oral cavity and certain syphilitic lesions. This resemblance I believe to be due to the fact that both are the result of tropho-neurotic disturbances; in the one case produced by syphilis, or syphilis and mercury combined, and in the other to general perversion of nutrition, or, more frequently, disturbances of the digestive apparatus.¹

Dr. Hadden² reports four cases which I believe to be due to tropho-neurotic disturbance. These cases were absolutely resistant to treatment, and consisted of a sensation of intense unbearable burning of the tongue and often the lips and roof of the mouth. In two of these cases there were certain objective symptoms. In one, a woman of 35, there was a small epulis; in another, a woman of 75, who was emotional and nervous, and had for many years suffered from nettle rash, the gums finally became involved and the teeth turned black and decayed.

¹ In a paper read before the North Texas Medical Society I called attention to the relation of herpes progenitalis upon the disturbed innervation incidental to syphilis. (Philadelphia Medical News, Feb. 8, 1890.)

² London Lancet, Jan. 25, 1890.

REPORT OF A CASE OF PARTIAL LARYNGECTOMY FOR CARCINOMA OF THE LARYNX.

Read in the Section of Laryngology and Otology at the Forty-first Annual Meeting of the American Medical Association at Nashville, Tenn., May, 1890.

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Since a few years the subject of pathology and and therapeutics of cancer of the larynx has engaged the profession in an unusual degree. The object of the discussion was, above all, to ascertain the best method of treating cases of this kind, to find certain and distinct indications by which we might be guided under all circumstances. This object, however, has not yet been attained. The views of various authors are still so different from each other that in every single case of carcinoma of the larynx the question, what to do with it, will have to be answered according to the individual experience and views of the surgeon attending the case. The principal question that arises is if the chance of prolonging the life of the patient is greater by not operating for the local trouble at all, except performing tracheotomy whenever needed, or by intralaryngeal procedure, or by performing extirpation of the larynx, be it a complete or a partial one; and in order to answer this question definitely it is not only desirable, but absolutely necessary, that *all* cases of this class should be recorded. Thus we will obtain, finally, such an enormous amount of statistical material as to enable us to draw from it definite and generally accepted conclusions.

Mrs. F. G., æt. 51, married for four years, no children, consulted me in the beginning of February on account of loss of voice. Had been in fair health all her life, with the exception of fainting spells, to which she had been subject for many years, more so in the last two years, after she had had a slight attack of sunstroke. A sister had died from heart disease, and a brother is at present suffering from it. She had passed the climacterium without any unusual trouble. About a year ago she had been afflicted with hoarseness, which would, however, disappear at times, and then reappear again. Finally the hoarseness remained permanent and increased gradually until the voice became entirely aphonic, which had been the case for several months. There had been of late, and this only at times, a slight pain in the left side of the larynx, and an annoying, hacking cough was sometimes present.

Stat. præs.—Physical condition fair. Patient is a slightly built woman with very little adipose tissue. Physical examination shows no signs of pulmonary affection, and especially no valvular disease of the heart. Pulse 84, regular, rather weak. There is complete aphonia and slight inspiratory dyspnoea. The laryngeal region is free from visible or palpable signs of swelling, and

there is no perceptible tenderness to the touch. The pharynx is normal. The larynx shows generally some hyperæmia. The right vocal cord appears to be normal, the left one is not to be seen. The latter is covered by a tumefaction filling the place of the left ventricular band. Instead of the latter there is an ovoid swelling the size of a small cherry, filling completely the left ventricle and the ventricular band. This swelling is covered by normal mucous membrane, and its outlines are not lost in a continuity with the surrounding tissues, but are sharply defined from them, causing the tumor to protrude into the larynx, as if pushing the ventricular band before it. The surface of the tumor is somewhat uneven, the color of the mucosa slightly deeper than that of the surrounding tissues, except the mucosa covering the left arytenoid cartilage, which is also slightly deeper in color. The left arytenoid cartilage is somewhat larger than that of the other side. This tumor is moved, during phonation, towards the middle line, but there is no complete approximation. Probing the tumor conveys the sense of solidity. The lymphatic glands around the larynx and the trachea are not enlarged.

Although there was no trace of a specific infection, patient was put under pot. iodid. for six weeks, without the least change in the size or appearance of the tumor. In fact, the dyspnœa was at times worse than before. The tumor corresponded so closely to the description of that form of carcinoma so admirably set forth by Prof. B. Fränkel in his paper on "Carcinoma of the Larynx" (*Deutsche Med. Woch.*, 1889), which has its origin in the ventricle, and which he calls *carcinoma ventriculare*, that his description is almost a pen-picture of the case under consideration.

There could be no doubt as regards the diagnosis. It was, therefore, after a consultation with Prof. J. Ransohoff, deemed the best to advise an operation, and under the circumstances, the affection apparently being limited to the left side of the larynx, a partial laryngectomy appeared to be indicated.

Operation April 15, 9 A.M. Present: Prof. Ransohoff, Drs. J. L. Krouse, J. E. Sommerfield, J. A. Thompson and M. Morris. Chloroform anæsthesia. An incision was made in the median line from the lower margin of the thyroid cartilage to the jugulum. Thereupon tracheotomy was performed below the isthmus of the thyroid gland. No hæmorrhage. An ordinary tracheotomy tube of the largest size (Hahn's sponge canula not being obtainable) was inserted and the anæsthesia continued through the same. The median incision was then continued upward to the hyoid bone and the muscles were lifted with a raspator subperichondrially, as described by Lennox Browne, from the left wing of the thyroid cartilage, together with the perichon-

drium. In this way all hæmorrhage was avoided. After this the larynx was split open from below upwards. There followed some hæmorrhage, and an attempt was made to tampon the trachea from above with aseptic cotton tampons. As this was not satisfactory, a rolled pillow was put under the shoulders of the patient and the operation completed with the head hanging over the edge of the table. This proved to be sufficient to prevent blood from entering the windpipe. The hæmorrhage, coming mostly from the crico-thyroid artery, was readily controlled. It was then seen that the tumor filled the whole left ventricle, involving part of the left vocal cord. The left arytenoid cartilage was somewhat enlarged; the right side of the larynx was not affected. The swelling in the left side of the larynx did not extend upward to the upper margin of the thyroid cartilage and downward below the vocal cord. The left wing of the thyroid cartilage was then detached from those muscular attachments that had not been previously severed, by keeping the edge of the knife or the raspator in close contact with it. This separation could be carried to the median line in the back, dividing the arytenoid and crico-arytenoid muscles from the posterior surface of the left arytenoid cartilage, thereby leaving all the muscles in front of the neck intact by simply separating them from the field of operation by retractors. Previous to this the crico-thyroid joint had been disarticulated, as it had been decided not to remove the cricoid cartilage. The thyro-hyoid membrane was now dissected closely to the upper margin of the left wing of the thyroid cartilage, and the left superior horn of the same was cut through at its base and allowed to remain, after which it was possible to lift the whole left side of the larynx with the tumor from its attachments. Then the mucosa covering the left arytenoid was divided in the median line closely to the cartilage, and the latter was then separately removed.

The hæmorrhage during these procedures, following the splitting of the larynx, had been trifling. The trachea above the canula was closely filled with iodoform gauze and a small-sized stomach tube introduced into the stomach from the wound. The latter was filled with iodoform gauze. Duration of operation, 1½ hours.

Patient rallied one hour after the operation. The temperature was then 99°, respiration 20, and pulse 84. During the following days the temperature ranged from 99.5° to 101°, respiration from 24 to 28, and pulse from 84 to 112. Nourishment was amply introduced through the stomach tube in the form of milk and whisky. The dressing was changed twice daily; the iodoform gauze plug in the trachea, which fitted closely, was renewed once a day. There was always an abundance of mucus and saliva in the wound, but none entered the windpipe. The dis-

charge from the tracheal tube was only during the first twelve hours somewhat tinged with blood; after that time there was a free but colorless discharge of mucus, which at no time had an offensive odor. There was never any pain in the chest, or dulness on percussion.

April 17, at noon, forty-eight hours after the operation, temperature 102, respiration 32, and pulse 112. Patient complained of pain on both sides of the neck above the wound. It was found that the upper end of the stomach tube had buried itself slightly into the tissues, where subsequently an emphysema on both sides of the throat had developed. The wound itself was looking healthy and was decreasing in size. The stomach tube was at once removed. In the evening of that day the temperature was 100, respiration 28, and pulse 96. The emphysema was gone and the patient complained no more of pain. For the purpose of feeding a stomach tube was introduced through the mouth.

Patient gained more and more strength, and was very cheerful. Asked to sit up on the third day, which was, however, not permitted. The wound was getting smaller and had a very healthy appearance.

April 19, on the morning of the fifth day, patient tried for the first time to swallow some solid food, and succeeded with but little pain and without any food entering the larynx. She repeated this at noon, and expressed her gratification at the result. In the afternoon, at 2 o'clock, her temperature suddenly rose, and was at 3 P. M. 104, respiration 36, and pulse 120. A very thorough examination of the wound showed the same to be in good condition. There was nowhere a retention of pus, the wound canal of the tracheotomy tube had a healthy appearance, and no trouble in the mediastinum could be ascertained. The discharge was pure mucus without any odor. No pain in the chest, no dulness on percussion. Giving her solid food was discontinued.

Five P. M., temperature 103, respiration 34, and pulse 120. From this time patient began to sink rapidly. She became restless and her temperature subnormal. Action of the heart became irregular and weak, respiration more and more labored. Stimulation very soon lost its effects. The extremities became cool, the pulse could often not be counted. Patient died at 11 P. M. with the symptoms of heart failure.

An autopsy was not permitted. Microscopic examination showed the removed tumor to be a typical carcinoma, developing from the ventricle. Although it cannot be denied that the fatal issue in this case was precipitated by the operation, the direct cause was, in my opinion, heart-failure on account of weak heart. The local condition of the larynx was certainly a favorable one for partial laryngectomy, and I would, under similar circumstances, not hesitate to pursue the same course.

SUGGESTIONS FOR THE RECONSIDERATION OF CRIMINAL JURISPRUDENCE AS AFFECTING INEBRIETY.

Read in the Section of Medical Jurisprudence at the Forty-first Annual Meeting of the American Medical Association, held in Nashville, Tenn., May, 1890.

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During the past twelve months I have noted two sentences (these are but a type of many others), which seem to me to have been as devoid of justice as of mercy. In France a soldier was condemned to die for, while in a state of intoxication, having struck his superior officer. In England, a man was sentenced to death for, while intoxicated, killing his mother-in-law.

When sober, and in full possession of their senses, neither of these accused was shown to have exhibited any inclination to insubordination or to violence. The criminal acts were conceived and committed when the doers were, for the time at least, *non compos mentis*, and incapable of forming a criminal intention, yet they were punished as severely as if they had harbored a criminal design. Granted that punishment was indispensable, how can there be a justification of inflicting as severe a penalty on a man who had no intention to offer violence, as on a man who deliberately and aforethought meditates the personal injury or death of his victim.

The exaction of the highest penalty of the law in such cases is a scandal to jurisprudence, undermining the beneficial influence and authority of the law, for the judicial office can be held in proper esteem only when wielded for the upholding of justice. Criminal procedure must fall in popular estimation when involved in the perpetration of injustice.

What is intoxication? Its determination, say from apoplexy certain stages of general paralysis and traumatic neurotic delirium, is often extremely difficult, if not impossible. Even if the sufferer be a teetotaler of the purest water, if he fall unconscious on the highway, either from rupture of a blood-vessel in the brain, from the pain of a fractured leg, from the agony of colic, from exhaustion or from any other cause, some average American or British bystander is sure to pour some alcoholic beverage down the non-alcoholic throat. The jubilee nephelist, as soon as consciousness returns, staggers on regaining his feet, probably mutters disconnectedly and so unintelligibly, that the spectators are of two minds as to whether curses or blessings are intended, their only common belief being that poor Eliphalet Nolt Jones is shockingly drunk, though this is positively the first time he has tasted