**REPORT OF A CASE OF EPITHELIOMA OF THE LARYNX;
REMOVAL BY THYROTOMY, AND NO RECURRENCE
AFTER THREE AND ONE-HALF YEARS.***

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Believing, as I do, that every case of radical operation for cancer of the larynx with its results, should be reported and recorded in some accessible volume, I hereby present the simple clinical history of an interesting case. Inasmuch as it is a favorable report, I have waited until a sufficient time has elapsed to insure no return before bringing it to your attention. The tendency in recent years is to lengthen the period of complete immunity before placing a given case in the "completely cured" list. Instances have been reported where recurrences have taken place after two years of apparent freedom, and very frequently after one year. In waiting three and one-half years, I feel that should anything ever show in the larynx of the person whose history I am about to report, it must be considered as a new involvement; certainly in no sense connected with the old one.

Mr. Blank, a clergyman of the age of 47, consulted me on the 23rd of March, 1903, complaining of hoarseness which had been annoying him during the whole winter; but during the last few weeks, so great had it become, that he had been compelled to relinquish all public speaking.

His history was a negative one, except that he had used his voice in his professional work freely and without stint. During twenty-five years of active pastoral work nothing has troubled him about his throat. His general health had been good. The family history was negative as regards any predisposition to tumor growths.

Examination showed a very healthy appearing neck and throat. Some slight naso-pharyngitis was present; otherwise nothing abnormal about the nose and throat until the larynx was reached. Here one found on first examination the right vocal cord and arytenoid normal in contour and slightly congested as was the whole interior of the larynx. The whole left half of the larynx seemed much swollen and no clear view of the vocal cord could be obtained, it being obscured by the left false cord.

I made no definite opinion at this interview, and prescribed simply inhalations of oleum pini silvestris.

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In a couple of weeks the swelling of the false vocal cord had diminished, and one could plainly make out as the congestion disappeared a white papillomatous mass which grew from the upper aspect of the cord and apparently came out of Morgan's ventricle. But little of the cord was visible, as the growth covered nearly the whole length. During the next few weeks, while the larynx seemed to be improving in a general way, the patient was educated so that he became very tolerant of manipulation.

It being my firm conviction that too much instrumentation is extremely bad for any growth in the larynx at the age of a patient of his years, I deferred doing any cutting operation until I was sure I could do it well. During all this period of three or four weeks the patient was directed to speak only in very subdued tones, and was to do no public speaking whatever.

Finally, late in April, a prolonged session resulted in complete removal of all visible portions of the growth, which was friable and came away only in small pieces. Some of these were subjected to microscopical examination, which was indefinite in its results; a soft papillomatous mass which presented no epithelial nests and only a suspected activity in the cells as shown by very doubtful mitosis. Following the operation the patient had no great pain. The vocal cord was freely movable, and there was no evidence of glandular activity in the neck.

The growth promptly recurred, and at the end of June was again thoroughly cleared out. The microscope showed the same doubtful condition as before. At this time the ventricle was cleaned out as well as possible and the whole surface cauterized with pure nitrate of silver fused on a probe. Considerable reaction followed, but quickly subsided, and as soon as the growth showed any sign of recurring, as it subsequently did, it was promptly cauterized with the pure stick. This was done perhaps five times in the following two months, but failed in the end to restrain the growth, although apparently very effective at first.

In September it became apparent that something more radical should be done if the patient was ever to use his voice again. Accordingly, in the last week of that month he was sent, with both microscopical preparations, to Dr. Jonathan Wright for examination and advice. Dr. Wright reported that when he looked at the specimens he was inclined to believe it benign. When he looked at the larynx, however, he was placed very much in doubt. In such a case where the growth was so broad of base he felt that he ought to advise removal through external incision.

This being my own view, and the patient acquiescing, on the 10th of October Professor William H. Carmalt did a thyrotomy, beginning with the usual ether narcosis. A simple incision down to the isthmus of the thyroid; tracheotomy just above it; anesthesia with chloroform for the rest of the operation. The larynx was split open in the usual manner. Once this was done there was not the slightest room for doubt as to the expediency of the operation. Quite a large mass of tissue was removed with forceps and scissors. To do this thoroughly it was necessary not to spare either the false or true cords. Perichondrium seemed perfectly healthy. After stanching the bleeding with hot sponges, every suspicious area was thoroughly cauterized with the Paquelin cautery. By this means also all the bleeding except the merest oozing was stopped. The perichondrium and thyroid cartilage were sewed together, the tracheotomy tube removed, and the whole wound stitched up, leaving a small drain at the bottom.

The patient was put to bed with the feet slightly raised, and passed a fairly comfortable night. Except for a most profuse bronchorrhagia which at first relieved the excessive dryness of the early night, and which continued with great violence for the first three days, and then suddenly ceased, there was an uneventful recovery. The temperature never went above 100.2° , which was on the third day. One stitch toward the bottom of the incision below the level of the cricoid ring became infected. This later discharged considerable matter, and finally a sinus developed which ran between the skin and the anterior wall of the larynx, and a probe after passing up three-fourths of an inch entered the larynx exactly at the anterior commissure of the vocal cord. This proved very annoying and tedious, at one time quite concerning us as to whether in the granulation tissue which developed cancer cells might not be in evidence. Early in December it finally healed up in response to very urgent measures, and since then the patient has had no trouble whatever either with his larynx or with the wound.

During the first three days he was nourished by the rectum, and larynx completely healed over. At the end of the first week a slough or scab came off, and from that time on the interior of the larynx was free from all symptoms.

He had no trouble in breathing except the first night, when the sticky mucus which preceded the bronchorrhea greatly annoyed him, although at no time was there the slightest distress for lack of breath, the annoyance consisting more in the pain which was caused by the coughing of the sticky mucus from the wounded surface.

During the first three days he was nourished by the rectum, and after the first twelve hours was allowed to suck ice and swallow sterile water in small amounts. The pain on swallowing was severe on the second and third days owing to the motion of the larynx in the wound, but this diminished gradually thereafter.

Examination of the growth showed undoubted epithelial nests and in the lower layers marked cell activity with multinucleation of the cells, leaving no doubt as to the diagnosis. No attempt was made at the time of the operation to remove any of the lymph glands, as there was not the slightest evidence of any involvement.

Since February, 1904, the patient has spoken in a perfectly audible but slightly husky voice; at the present time the huskiness is hardly noticeable. At my suggestion, he has entered into editorial and other duties which require little or no use of his voice. Now he can speak loud enough to fill a large audience room, but he does not attempt it.

A fairly good presentment of the vocal cord has been produced in the shape of a dense white band where the true cord should be and of which it is probably a part. The false cord is flatter than normal, and Morgan's ventricle practically eliminated. I have seen him within a month, he having made the journey to me in order to make this report complete, and his larynx is in absolutely perfect condition.

By way of comment upon the case, it may not be amiss to emphasize these facts:

The ever present difficulty in coming to a diagnosis.

The wisdom, even when in doubt, of operating in a way to insure complete removal.

The oft repeated observation of the surprising differences in the appearance of the growth when the larynx is open.

The impossibility of being sure you have removed everything malignant; hence the wisdom of the use of the Paquelin cautery.

The possibility, when the larynx is roomy, of shutting up the whole wound instead of leaving the tracheotomy tube in place.

The unquestionable advantage of an absolutely recumbent position with the feet raised, during the first days following the operation.

And finally, that when you have an intelligent, brave and tractable patient, how small the suffering seems as compared to the mercy of a complete cure.

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