MALIGNANT DISEASE OF THE TONGUE, WITH A
REPORT OF TWO CASES.*

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It is apparent to everyone that malignant affections of the tongue and upper air passages are on the increase, and I believe that it is only by the careful study of these affections both from the clinical side as well as from the pathologic standpoint, we can ever hope to gain any definite knowledge regarding this at present much unknown subject. In the majority of instances, it is the throat surgeon to whom these unfortunate patients first appeal for relief, and upon him devolves the responsibility of making an early diagnosis and of insisting upon an early operation in order to bring these cases to a successful issue. It is, therefore, very desirable that whenever the opportunity offers there be a free interchange of our experiences, and with that end in view I have to report two interesting cases that have recently come under my observation.

Case I. Last summer, while in Paris, I was consulted by a friend of mine, a man about 60 years of age, for what he considered an obstinate ulcer of the tongue. I knew him to be a man of abstemious habits, both as regards smoking and drinking.

On examination I found an indurated ulcer about the size of a ten-cent piece on the right border of the tongue, about its posterior third. It had an irritated appearance, caused by the use of strong applications of nitrate of silver and an iodine gargle, which he had been using on the advice of the several physicians he had previously consulted. There was a general sense of discomfort and occasionally pain at the seat of the ulcer. No enlargement of the glands on either side of the neck was observed. All local applications were positively

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prohibited, and he was referred to Mr. Butlin, whom he saw within ten days, who confirmed my diagnosis of a malignant growth of the tongue, and urged an immediate operation. This was about the latter part of August. I reached London in time to be present at the operation, which was done September 1st. A preliminary laryngotomy having been done, the whole right half of the tongue and a portion of the floor of the mouth was excised by means of the scissors, a gauze wick was placed in the back of the tongue near the floor, while the edges of the anterior half were brought together with cat-gut sutures. The patient made a rapid convalescence, being able to be about his room within ten days.

About three weeks from the date of the original operation, Mr. Butlin made a complete dissection of the right side of the neck, removing all the glands that could be found. From this operation the convalescence was also quick and favorable, and he was able to return to this country about the latter part of October.

The pathologic report from the Imperial Cancer Research Committee states that nothing looking like cancer was apparent either to the naked eye or to the microscope in the glands; but that in regard to the tumor removed from the tongue, was extremely unsatisfactory; it states the growth is a well developed squamous cell carcinoma which infiltrates very widely, isolated groups of epithelial cells being found in the deepest parts of the thin slice from the center of the growth.

From the time of his arrival in this country until January 1st, he was under the careful observation of Dr. Collins Warren of Boston, after which date he returned to Washington and came under my care. I made three examinations, a month apart, and found him in a most satisfactory condition. There was not the slightest evidence of any return of cancer in the mouth, and while not expecting any trouble on the left side of the neck, I carefully searched for enlarged glands on that side as well as on the affected side. March 13th, two weeks after the last examination, he reported at my office, stating he had discovered a small swelling in the left side of the neck. The examination revealed a small glandular enlargement about the size of an almond, located about the bifurcation of the common carotid. There was no tenderness and no other enlarged glands could be detected. He then

stated he had an imperative business appointment in Florida, which he desired to keep. I at first advised against his going, but finally yielded, with the understanding that he should return immediately if he found there was an increase in the swelling. Instead of being absent two weeks, as he expected, he returned within five days. The glands in the neck had enlarged very rapidly, a large painful mass could easily be felt over the carotid artery, the tongue was heavily coated and he had intense pains extending over the left side of the face and head and down into the left arm.

Dr. Finney was called in to see him, and it was decided to operate, which he did March 28th. As soon as the neck was opened his condition was found to be much more grave than we anticipated, a large cancerous mass was found in the deeper parts of the neck well under the steno-cleido mastoid muscle, and so firmly attached to the internal jugular and the common carotid that the coats of these vessels contained cancerous tissue which it was impossible to remove. It therefore became necessary to ligate and excise an inch or more of both vessels. The submental and maxillary glands were slightly enlarged, and they were also removed. The wound was then closed, except for the lower third of its extent, in which was placed a gauze wick for drainage. On opening the excised portion of the carotid artery, the vessel was found to be in the most advanced stage of atheromatous degeneration, and attached to one of the atheromatous plates was a large and firm thrombus. The duration of the operation was about two hours and the anesthesia used was ether.

The patient rallied well from the anesthetic and passed a fairly comfortable night, but about 8 o'clock the following morning he developed a complete hemiplegia. At 3 o'clock the same afternoon pneumonia in the left lung set in, and he died at 4 o'clock on the following afternoon, just forty-eight hours after the operation.

Case II. This case was in a man 70 years of age, unusually vigorous for a man of his age. I had been seeing him frequently for the past year or more for an obstinate dysphagia, without being able to find a cause for it. I saw him for the last time about the latter part of April, 1905, prior to his leaving town for the summer. Nothing abnormal about his larynx or fauces could be detected then. October 1st he came to see me for the customary examination, and I found

at the base of the tongue a large mass projecting out of the larynx up to the level of the tongue, and having the appearance of an exaggerated degree of edema of the epiglottis. There was no pain in the region of the larynx nor any difficulty in swallowing. In fact, the patient was not conscious of anything wrong with his throat. The growth bled easily on manipulation. Examination of the neck showed a small glandular enlargement about the bifurcation of the common carotid artery on the left side; a small portion of the growth was excised and sent to Dr. Carroll, the pathologist of the Army Medical Museum, for examination. The following is his report:

"An examination shows that the condition is one of surface epithelioma without the formulation of pearls. The dipping downward of the growth from the surface epithelium can be clearly traced. The location appears to be at the junction of the tongue and epiglottis, and the transition from stratified squamous epithelium to minute papillae is distinctly shown. No muscle fibres are found, and the underlying tissue consists of lymph nodes and alveolar tissue rich in lymphoid cells and lymph vessels."

An operation was decided imperative, and Dr. Finney was asked to take charge of the surgical side of the case. October 17th, the patient being under anesthesia, Dr. Finney did the Kocher operation. As soon as the tongue was drawn through the opening in the mylohyoid muscle, the floor of the mouth and the upper part of the larynx were brought well into view. It was then discovered that the growth sprang from the base of the tongue, and the epiglottis was not at all involved, as we were led to believe by the laryngoscopic appearances. The epiglottis was, however, curled upon itself from the pressure of the growth. The left half of the tongue was removed and a portion of the base of the right half. The submaxillary and sublingual and several enlarged cervical glands were also removed through an incision carried some distance down to the neck. The wound was then partially closed and a gauze wick passed from the mouth through the opening in the most depending portion of the wound in the neck.

The patient made a slow but uninterrupted recovery, the wound taking about six weeks before it completely closed. He was very much annoyed during this period by fluids and

food passing from the mouth through the wound, necessitating frequent changes of the dressings. The sinus finally closed, but there was left a thick and indurated condition of the neck over the site of the sinus.

The articulation in this case was very much disturbed in the beginning, but of late has been gradually improving. Another annoying symptom, and one that continues to trouble him very much, is the constant accumulation of mucus in the mouth.

In the early part of April the swelling in the neck became very red and painful and finally broke down, discharging some pus. At first it seemed as though this was a secondary infection of the skin, but under the use of the X-rays the parts thoroughly healed again, and all the thickening and induration have been absorbed, and at present, nearly eight months since the operation, there is no indication of any recurrence.

These two cases are both interesting and instructive, and show the decided importance of an early recognition of this dreaded disease. Jacobson and Steward in their work on "The Operations of Surgery," state that it will be a happy day when the belief is accepted and acted on, that cancer of the tongue, like many other epitheliomata, has a precancerous stage, and this is the stage when we should operate. **The terrible malignancy of cancer of the tongue is shown by its rapid development which is aided by the warmth and moisture of the mouth, and by the constant irritation it is subjected to, and also by the almost certain and early invasion of the glands of the neck.**

Case I is an unfortunate example in the delay of recognizing the disease, and shows several features, especially the absence of infection of the glands of the neck on the affected side, and the sudden outburst in the glands on the opposite side of the neck. Mr. Butlin, in speaking of the case, says **it evidently was hopeless from the beginning, but we should not take a desponding view of the treatment of epithelioma of the tongue; it was an exceptional case and an earlier operation might have had a more successful result.** He also states that affection of the glands on the opposite side of the neck, **when the disease is actually on the border of the tongue, as it was in this case, is a very unusual occurrence, although he has met with it two or three times.** He is

not prepared at present to advocate the removal of the glands on both sides of the neck in every case of cancer of the tongue; but, on the other hand, he does not venture to declare that it may not become a routine treatment at some future date, when we have more information regarding the proportion of cases in which glandular affection of the opposite side is likely to occur.

Case II was also of a highly malignant type and showed an unusually rapid development. Of course, it is too soon to say what the final outcome of this case will be.