A LECTURE ON CANCER OF THE TONGUE AND ITS REMOVAL.

BEING THE LATTER PART OF A POST-GRADUATE LECTURE.

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THUS, Gentlemen, the various appearances I have shown you during the last few minutes are all the result of inflammation of the superficial structures of the tongue; but the point of chief interest to you, as family and general practitioners, is to know whither, when not cured, such diseases may lead. Now, whether the changes in the mucosa assume the form of nodules, plaques, fissures, ulcers, psoriasis, leucoma, or ichthyosis, their tendency is towards that which you have most to dread—malignant disease. Nor must you suppose that the tongue is exceptional in this ultimate tendency to long-continued irritation. Indeed, I may take occasion here to remark that malignancy in any part of the body is very often a provoked malady; for instance, how frequently a malignant tumour of the mamma is ascribed by the patient to a blow, sometimes perhaps erroneously, but in the majority of instances correctly. Again, remember how often those tumours are preceded by an irritation which manifests itself by an eruption round the nipple and about the areola. Epithelioma in the upper lip is a very rare disease, in the lower one it is very common. The structure of the two lips is identical; the pipe of a smoker is equally in contact with both, but the lower one is movable, and is often bitten or otherwise marred by the teeth, which is rarely the case with the upper. Further, let me recall to your memory that about six years ago I published a paper on what I ventured to call "Acute Traumatic Malignancy,"¹ pointing out that injuries to bones, and sometimes to serous membranes, were not infrequently followed by malignant disease of a rapid kind.

Let us, then, accept the doctrine that long-continued irritation and slow inflammation of certain parts—the tongue being a conspicuous example—may, in a goodly proportion of instances, lay the foundation, or be the earlier steps, of a very terrible disease. Grant this, and you will see at once how essential it is to watch such chronic glossitis very closely, to allay irritation, and more especially to avoid all irritating applications. Thus, if the patient smoke, if he take highly spiced food, he should be directed to discontinue or greatly modify these habits; if he have rough and bad teeth the defects must be corrected. In treating fissures, ulcers, etc., nitrate of silver or sulphate of copper must especially be avoided; the mouth should be washed after each meal; boracic acid or bismuth lotions may be used. Chromic acid is recommended by Mr. Butlin for fissures, and although in some cases this is useful, I venture to think that he has a little exaggerated its value. Syphilitic conditions must, of course, be treated specifically, for remember that although it is often essential though difficult to distinguish this form from the malignant ulcer, the one leads not seldom to the other.

If, in a well-watched case, malignant disease should nevertheless set in, or if the patient, having neglected the prodromata, should only come under notice when such disease is already developed, let me impress upon you the high—the extreme—importance of prompt action; every day lost is an evil.

I will not now detain you with any special description of cancer of the tongue, which almost, though not quite, invariably, is epithelioma.² A foul, excavated, indurated ulcer must always excite the gravest suspicion, especially if the organ be at the same time markedly immobile; nevertheless, such a sore may be syphilitic, and occasionally it will be impossible to distinguish with absolute certainty save by snipping away a small portion for microscopical examination, and even then the absence of can-

cerous structure from the detached piece does not conclusively prove non-malignancy, though sometimes it may be proved by finding that antisyphilitic remedies have a rapid curative influence. But, let me repeat it, do not lose time while using all means to insure accuracy; spare no pains to make the diagnosis quick as well as sure. If your ultimate decision is that the disease is malignant, remember that we have no remedy for such condition save total and entire ablation; to temporise with palliatives is a dangerous, often, indeed, a disastrous, error.

The method of excision which I recommend is one that I devised about eight years ago,³ and have practised ever since, with two exceptions; it has certain marked and very important advantages, which you will be better able to appreciate when I have explained the method itself. The instruments required are a gag, a small scalpel, two rather long Liston's needles, two *écraseurs* with soft iron wires,⁴ and a guide. When the usual precautions for keeping the mouth open and for drawing forward the tongue are taken, the head being held strictly straight and thrown slightly back, the surgeon feels for the hyoid bone, immediately in front of which he makes an incision about three-eighths of an inch long exactly in the middle line, and with the edge of the scalpel directed forward. This incision exposes the *raphé* of the *mylo-hyoid*, which is divided; the *genio-hyoid* and *genio-hyo-glossi* are separated. Now a Liston's needle armed with ligature silk is passed into the wound, carried on the left side beneath the mucous membrane, through which it is thrust on a level with or behind the last molar tooth; in withdrawing the needle one end of the silk is left in the mouth. Another armed needle is now passed on the right side in the same way, save that the loop is left in the mouth. The *écraseur* wire, with its end sharply bent into a hook, is tied to the first-named piece of silk, that is to say, to the end of it which hangs out of the supra-hyoid wound, and by traction on the other end the wire is drawn into the mouth; the silk is immediately cut away, the hook of the wire is caught into the loop of the second silk, and is drawn out of the mouth through the supra-hyoid wound. Thus has been cast round the tongue, as far back as one will, the loop of the *écraseur*; but to prevent any chance of slipping forward I use as a guide an instrument rather larger than an eyeless Liston's needle, which I pass into the wound through the middle line of the tongue, guiding it in any chosen direction by my left forefinger placed on the tongue at the spot selected. This instrument an assistant steadily holds while the surgeon, turning the *écraseur* screw, separates the tongue posteriorly. As soon as the wire comes out of the supra-hyoid wound the loop of another *écraseur* is pressed well down in the incision just made, and being set to work completes the separation of the tongue, which is taken out from between the teeth. Two points require notice: the armed needles are passed inside the trunk of the lingual arteries as they course upward on the side of the tongue; thus there is no chance of bleeding in the first cut of the *écraseur*; the nerves (*linguo-gustatory*) generally resist division, and will afterwards be seen hanging like frayed-out threads in the mouth; they should be taken up in forceps, and snipped off close to their emergence from the soft parts, namely, just above the angle of the jaw. A drainage-tube should be kept in the supra-hyoid wound for three or four days, and a piece of absorbent cotton wool placed under the chin. No other dressing is desirable.

Now this method has three very marked advantages: 1. It is all but bloodless, the first cut with the *écraseur* runs through parts in which there are no large vessels, the wire running inside the trunk of the linguals; nevertheless, the screw should be turned slowly. What little blood flows is venous, and comes from the distal part of the tongue, which, of course, is congested and strangulated previous to being severed. The second cut chiefly involves the vessels of supply, and must therefore be made gradually. 2. The sensory nerves are severed at their exit from the groove on the jaw, therefore the stump of the tongue is insensitive to pain. 3. The wound left is infundibular, the mouth of the funnel being, of course, at its lowest part, so that the cavity, completely drained, is very easily kept clean and pure; therefore, there is no danger of septic pneumonia.

Patients operated on thus not only have no pain after the operation, but, being relieved of a tender sore on the tongue, are much more comfortable immediately after operation than they were before. They are not weakened by loss of blood; and, as the mouth is free from pain, they can take large quantities of liquid food.

¹ See my paper and a leading article upon it in the JOURNAL, February 11th, 1882. The views there formulated have since been adopted by the whole profession.

² On the table was exhibited a specimen of scirrhus.

³ Clinical Society's Transactions, vol. xiv, p. 147.

⁴ The wire I use is a strand of the wire rope used for park fencing.

very few hours after the operation. My last patient, who was a good deal emaciated, could from the second day onward take a pint either of milk, milk and egg, or broth every two hours. This is a vast advantage in weak patients over any mode of operation, which necessitates feeding *per rectum* instead of by the natural way. Of course, while taking food, the opening above the hyoid bone must be closed with the finger. Another point due to the painless condition of the tongue is the rapidity with which patients begin to speak. Short sentences are quite comprehensible.⁵ Probably also due to the painlessness is good sleep and the rapid way in which such patients, being fed as above described, begin to put on flesh. It may also in part be due to the fact that there is no dribbling down into either larynx or pharynx of putrid matters from the mouth.

One of my patients, a weakly man, still further weakened by his disease, was operated on at 4 P.M. on a certain Saturday. On the Sunday he took food fairly well; on the Monday, copiously. On the Wednesday he got up for an hour and a half, and the next day asked for a mutton-chop (refused). On the next day the drainage-tube was omitted. On Sunday (ninth day) the tongue-wound was quite clean. There never had been any putrescent odour.

I here append an account of the cases operated on by me after this method.

CASE I.—J. A., aged 60.⁶ Epithelioma extending back to foramen cæcum. Tongue removed January 13th, 1881. One month afterwards the man was up, having suffered no pain. His speech was remarkably good. He is still living. No return.

CASE II.—W. P., aged 69, feeble. Epitheliomatous ulcer, very foul, deep, induration reaching to midway between foramen cæcum and epiglottis. Tongue removed February 24th, 1881. The man had no pain, and lost practically no blood. He died in June, 1884, apparently of old age. There was no return of disease.

CASE III.—Mr. F., aged 57, had on left of tongue a large epithelioma, with induration extending across middle line. Removed tongue a little in front of the epiglottis June 11th, 1881. He made rapid recovery; had very little pain. He was still well in May, 1882, and had gained weight. In January, 1883, he died of bronchitis, the result of getting wet through while driving.

CASE IV.—J. H., aged 43. Large foul epithelioma. Removed tongue far back February 24th, 1882. He made rapid recovery. After May, 1883, at which time there was no return, I lost trace of the patient.

CASE V.—Mr. M., aged 58, feeble, and having lost flesh of late; extensive epithelioma reaching far back on right side, and on left side a cancerous nodule; an enlarged gland behind body of jaw; patient suffered severely. Declined to operate, but patient insisted on plea of relief from pain. Removed tongue, February 24th, 1884, and removed gland by separate incision. He was much relieved; three days after took food better than for months. I saw him in October, in better health than before, but still feeble. In November he began again to lose flesh rapidly. I could find no return of disease in the neighbourhood of the tongue at that time. In January, 1885, he had frequent vomiting, and I found a small hard lump in the epigastrium. He died in February, probably of cancer of the stomach; no *post-mortem* examination. The parts about the scar were hard, probably—though there is no proof of it—from malignant infiltration.

CASE VI.—Mr. T., aged 54; peculiar condition of tongue, the whole organ of stony hardness, very immobile; a small ulceration far back on the left side. He suffered severely from frequently-recurring lancinating pains. Although I told him that the disease would probably recur, he insisted on being relieved of the painful tongue. I removed it on February 8th, 1884, close to the epiglottis, and as low in the floor of the mouth as possible, afterwards taking away two portions with scissors, and tying the vessels. I feared, however, at the time that some infiltrated tissue was probably left. He was, after the operation, almost quite free from pain, and took food with comparative ease. By the middle of March the wound was healed, except a portion far back on the right side. In May this wound had spread, and in November he died of recurrence. A limited *post-mortem* examination showed the œsophagus to be also cancerous two inches from the stomach; there were also secondary growths in the liver.⁷

CASE VII.—J. W., aged 48; syphilitic; says he has drunk largely, but of late very moderate. Large foul deep epithelioma of left side; induration extending across. Excised tongue October 15th, 1884. Recovery painless, rather slow. Saw him last in August, 1886. He had been drinking heavily for some months; anasarca of feet and sometimes of face; albuminuria. In February, 1887, I heard that he had died of "dropsy." I cannot speak of my own knowledge as to the tongue, but his brother assured me that there was nothing wrong with it.

CASE VIII.—Mr. M., aged 51.⁸ Large epithelioma far back, and an enlarged gland close to the jaw. Excised tongue and removed gland by separate incision, March 13th, 1885. Rapid, painless convalescence. No appearance of recurrence up to July, 1887.

CASE IX.—G. L., aged 49; very foul epithelioma, chiefly on under surface and encroaching on edge of tongue; removed, June 25th, 1885. Wound suppurated more than usual; pus drained freely from superhyoid wound; on the seventh day this diminished; allowed to get up on the twelfth day. In February, 1886, was seen without sign of recurrence; lost sight of since.

CASE X.—J. H., aged 51; epithelioma of tongue, extending far back, removed November 20th, 1886, not far from epiglottis; recovery rapid; left hospital January 19th, 1887. Last seen in June, speaking very fairly, with no sign of recurrence.

CASE XI.—Mr. B., aged 54, smokes a great deal, doubtful history of syphilis. Epithelioma of tongue a little to left of raphe, 1½ inch from lip. Tried antisyphilitic remedies without benefit; small piece removed, evidently carcinomatous. Removed February 15th, 1887; no pain after operation; remained in England till the end of July. In December he wrote that he was never better in his life.

CASE XII.—J. G., aged 52, has been treated as out-patient for syphilis, has epithelioma of right side of tongue, wide induration; removed August 9th. Recovery very rapid; left hospital, August 30th. In the early part of March, 1888, I found he had an enlarged gland under the jaw, which was certainly not perceptible at time of operation. It could have been easily removed, but the man was pretty far advanced in phthisis.

Case XIII is not yet complete; it is that of Mr. F., who was sent to me by Dr. G. Barnes, of Axminster; thus far, ten days after operation, all has gone on after the painless and facile manner above described, the patient gaining in strength; but an enlarged gland under the sterno-mastoid, which could not be removed at the same time, awaits excision. I can hardly hope for complete success in so bad a case, but at the very worst I have been able to confer upon the patient a period of calm and painless life. Indeed, until the whole profession and the public are fully alive to the dangers of allowing a sore tongue to remain practically untreated,⁹ the operating surgeon will in certain cases be unable to effect more than this.

Thus of the twelve completed cases, two were operated on under the understanding that the design was merely alleviation of pain. In one case disease returned in a gland which, however, could have been removed, but for pulmonary tuberculosis. The record, therefore, presented by these cases is remarkably good, and when that is coupled with the fact of painlessness and of ease experienced, I feel confident that my operation is an advantage and a boon.

CARLOW UNION.—At a recent meeting of the Carlow guardians it was unanimously resolved to grant Dr. Phillips, late medical officer of Leighlinbridge Dispensary, a retiring allowance of £107 16s. 5d. per annum. Dr. Phillips had been thirty-seven years in the service of the board of guardians.

A THERAPEUTICAL CONGRESS.—An international congress of therapeutics and materia medica will be held at Paris from August 1st to the 5th, 1889. The following questions, among others, are proposed for discussion:—Antithermic analgesics, chemistry and pharmacology, physiological and therapeutical action, etc.; cardiac tonics, their nature and special action, relative value of plants and of their active principles, alkaloids and glucosides; the antiseptics especially antagonistic to each species of microbe; new drugs of vegetable origin; uniformity of weights and measures; advantages of the international pharmacopœia. Communications should be addressed to Dr. Bardet, 119 bis, Rue Notre Dame des Champs, Paris.

⁵ My last patient gave an answer orally, which I had expected to obtain in writing, fourteen hours after operation. I asked how he was getting on, and he said, "Very well, I think (we we, I think)," quite distinctly.

⁶ *Clinical Society's Transactions*, vol. xiv, p. 147.

⁷ The tongue, a case of scirrhus, was exhibited.

⁸ *Lancet*, December 31st, 1887.

⁹ The patient, No. xiii, went to a chemist, and for months was set to suck lozenges.