THE PAROTID GLAND.

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FROM the high organization and complex relations of this gland, we should expect to find it the frequent seat of disease; but the united testimony of the most experienced surgeons has proved the truth to be quite otherwise—in other words, that disease of this organ is exceedingly rare; far more so than is to be accounted for, upon anatomical or physiological principles; as if “He that tempers the winds to the shorn lamb,” mindful of its fearful relations, and the difficulty of surgical access to it, had especially interposed some invisible and almost insuperable defence to protect it from disease and the perils of surgical interference.

Most of the older surgeons, among whom were Boyer, Allan Burns, Richerand, and others of equal distinction, both in this country and Europe, were disbelievers in the practicability of the removal of this gland; and it is comparatively recently that we have had warm discussions, relative to its possibility, among the most distinguished surgeons, even since it has been several times successfully removed. Many of your readers will doubtless recollect something of the spirited controversy that arose some years since between Profs. G. of the Pennsylvania University and P. of the Jefferson School of Philadelphia, relative to this subject. Prof. P. was *sure the operation could be, and had been, done successfully*. Prof. G. was *quite as certain it never had been, and never could be, done*. As I was spending a season in Philadelphia, soon after this occurrence, I was told there were strong hostile feelings existing between the two distinguished Professors, which grew out of the above controversy, and which I suspect were never compromised, as Prof. P. had left Philadelphia for the New York University. While in Philadelphia at this time, I purchased, among other volumes, at auction, from the library of a physician who was about leaving the city, a copy of Prof. G.’s work on “Surgery,” which is still in my possession; and on a blank leaf of the second volume I find, as a quotation from a lecture of Prof. G. to his class (written, as I supposed, by a student, or some one attending his lectures), the following decisive denunciation of this operation:—*“Therefore, in spite of Scotch assurance, and English arrogance, and Irish impudence, and French politeness, and Yankee impertinence, the parotid gland never has been, and never can be, completely removed by the knife.”*

This emphatic declaration sufficiently indicates the spirit of the controversy, and the assurance of Prof. G. that he was prepared to defend his position against a considerable portion of the world. Whether Prof. G. is still of the same opinion, I have no means of knowing; but certain it is, that since then there has been sufficient testimony to reverse his decision; and as it may be well to avail

ourselves of the moral lessons strown in our paths, let us remember, that when we differ from those who have opportunities and capacities for judging equal to our own, such a difference is, at least, circumstantial evidence of the possibility that we are in the wrong.

It is not surprising, that the anatomist who contemplates the location and complicated relations of this gland, only in its normal state, with the external carotid and jugular vein passing through its substance, and sending off numerous and important branches, in its course through the gland, traversed also, as it is, by the facial and temporal nerves, and crowded between and wrapped about the numerous and inaccessible muscles, the neck of the condyle, internal ligaments and articulation of the lower jaw, and in close proximity to the internal carotid artery, jugular vein, pharynx, pneumogastric, glosso-pharyngeal and spinal nerves; and shut almost from view and reach, by its anterior boundaries, the ramus of the jaw, mastoid process, mastoid muscle and external auditory meatus—I say it is not surprising that he should have come to the conclusion that its extirpation was impracticable. But those surgeons who have been driven to the extreme alternative of attempting its removal, and who have consequently learned more of its pathology, have noticed, as observed by Dr. Randolph, that in a diseased condition its capsular investments have been found contracted to such a degree as to cause deep-seated and irregular prolongations so far to recede from their inaccessible positions, as to render its removal practicable.

In a note to Cooper's Surgical Dictionary, Dr. Reese awards the merit of having first removed this gland to Prof. Samuel White, formerly of Hudson, N. Y., in 1808. Yet, Dr. John C. Warren speaks of his father having done the operation as early as 1804, although he did not tie the external carotid. M. Beclard performed the operation in 1823, and Prof. McLellan in 1826. The operation has been done many times since; but the long catalogue of tumors, that have been removed from the parotid region, supposed to have involved the gland, and reported accordingly, are believed to have been tumors made up of diseased lymphatic glands and their adjacent tissues, which, by pressure upon the carotid, have occasioned its absorption, till tumors, originally superficial, have been by their external coverings pressed partially, or quite, into the parotid cavity; and as they carry before them all the important relations of the carotid, and have none of their own, their extirpation is attended with no risk or difficulty; hence we account for those operations unattended with hæmorrhage, and requiring the ligature of no important arteries, and not followed by paralysis of the muscles of the face.

There has been a diversity of opinion, relative to the propriety of tying the external carotid, as a preparatory step to the removal of the parotid. As this artery passes through the gland, I

see no way of avoiding its division, when the whole gland is diseased, and is to be removed; and it therefore must be tied either before or during the operation. This being admitted, I see no adequate reason for doubting the expediency, where the extirpation of a parotid tumor, that is known to involve the gland, is to be attempted, of doing this before the operation; the liability to abundant and possibly fatal hæmorrhage, is in that way avoided.

I am aware that there are one or two instances where, it is said, experienced surgeons have removed the gland, leaving the trunk of the artery undivided. In such instances, it is probable that that portion of the gland about the artery was not diseased. Dr. Warren has observed that this is sometimes the case. But all, I think, are agreed in the universal necessity of dividing all the branches of the artery above its entrance into the gland; and there can be but little difference, physiologically, between obliterating all the branches, and the main trunk, a few lines below.

In several instances, have the lives of patients been eminently perilled, in the hands of the most distinguished operators, by the accidental division of the carotid, and even of its branches. Mr. Carmichael came near losing his patient, by hæmorrhage from the trunk of the facial artery; pressure upon the carotid was not sufficient to control the torrent. M. Beclard had a dangerous hæmorrhage from either the external carotid, or one of its branches close to the trunk—which, was not determined. Our late distinguished and veteran surgeon, Dr. John C. Warren, accidentally divided the trunk of the external carotid, which deluged the wall, operator and assistants with blood. And in these instances, a good deal of difficulty was experienced in securing the vessels, owing to their retracting to positions difficult of access, and the intervention of the tumor between the operator and the vessel.

It has been thought, by some, that the vessels of the parotid have, in certain instances, been so completely obliterated by disease, as to permit its removal without hæmorrhage or the ligation of its arteries. If this has ever been so, it has been exceedingly rare, and must be too doubtful a contingency for any practical reliance.

The following case appears to me to illustrate a very good method of proceeding, where there is doubt whether the gland be involved in the disease.

Mrs. G., a married woman, of about 40, of plethoric and corpulent habit, had a swelling which suddenly appeared in the parotid region, some eight years previous to its removal, and which was supposed to be the *mumps*; contrary to expectation, however, it did not wholly subside, but became chronic, and remained stationary for several years; for the last two years, it increased in size with considerable rapidity, assumed a conical form, became painful, and the patient grew anxious as to the consequences. **Constitutional and local treatment was unsuccessfully tried, for a time,**

to bring about, if possible, its resolution. Several physicians advised its removal by an operation. As I had observed the development of the disease from its commencement, and supposed it to involve the parotid, I dreaded so formidable an operation, both as regarded myself and my patient, and did not encourage it, till urgent symptoms and the frequent solicitations of the patient no longer left excuse for delay.

The tumor—extending anteriorly from the zygomatic process, downwards, over the masseter muscle and angle of the lower jaw, and posteriorly, from the mastoid process of the temporal bone, downwards, over and under the mastoid muscle some four inches, crowding upwards the external auditory meatus, and somewhat backwards the mastoid muscle—was, by the advice and assistance of Drs. Allen and Samuel Bradbury, removed in this wise.

An incision was made from the root of the zygomatic process, downwards, in the course of the external carotid artery, about four inches; a second, from a point about half an inch below, and a little posterior to the mastoid process, obliquely downwards and inwards across the centre of the first, about three inches in length, across the angle of the lower jaw. The flaps being dissected up, most of the exterior surface of the tumor was exposed to view. The attempt was now made to dissect up the anterior portion of the tumor, but it being very vascular, and the anterior portion of the gland being involved, it was concluded, after tying several arteries, to reserve this part of the dissection until the last, when the hæmorrhage could be better controlled; therefore, that portion of the tumor lying over, and attached to, and around the mastoid muscle, was dissected up; when it was found that the tumor occupied the parotid cavity, and involved the deep portion of the gland. Now, having no confidence that the gland could be wholly removed without a division of the external carotid, to avoid further hæmorrhage and that useless process of tying all its branches and the trunk at last, the first incision of the integuments was extended so far below the boundary of the tumor and over the carotid, as to permit dissection to the artery below the boundary of the tumor, when it was tied with a double ligature, and divided between its branches. After this, the tumor was, by a cautious and slow dissection, completely removed, without further hæmorrhage or difficulty of importance.

After the removal of the tumor, the boundaries of the parotid cavity were entirely exposed, and also most of the relations of the tumor. That portion of the carotid above its division was found passing through the substance of the tumor, with the ligature attached to it. The large cavity was dressed from the bottom, and was filled by granulations with considerable rapidity; some eight or ten weeks elapsed, however, before the wound was completely healed. As was to be expected, considerable paralysis of the muscles of the side of the face succeeded the operation; but

it is to be hoped that in time the efforts of nature will remove this deformity, as it has done in some other cases.

The superficial portion of the tumor was found to be composed of condensed, cellular tissue, interspersed with enlarged and indurated lymphatics. The deeper structure had the granulated appearance, indurated, but indicative of its primitive structure; but the very internal portion was of a *medullary consistency*, which facilitated its removal, leaving, however, some apprehensions in regard to the result. But now, some fourteen months have passed, and there have been no symptoms, either local or constitutional, of a threatening or suspicious character, and the patient is quite well.

TREATMENT OF NEURALGIA BY SUBCUTANEOUS INJECTION.

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[Concluded from p. 247.]

CASE VII.—*Neuralgia of Twenty Years' standing, seated in the Pes Anserinus of the Portio Dura of the seventh, or facial Nerve, and the third union of the Portio Dura with the Trifacial; Injection at the Temporo-Maxillary point; relief.*

THE following case was placed in my hands by my esteemed friend, George Bartlett, M.D., of this city, in October, 1859.

Mrs. ———, of Boston, widow, 48 years old, mother of three children, of nervo-sanguineous temperament, has been subject to neuralgia for the last twenty-six years. Her father was healthy; but her mother, who is still alive, and 74 years old, suffered from early youth, for many years, from the same complaint. Her two sisters have never had neuralgia. She has been delicate and sickly from childhood, but has never been subject to rheumatism, or any kindred malady.

Twenty-six years ago the patient experienced, for the first time, a very severe paroxysm of pain in the superior maxillary and malar bone, without being able to assign any cause for it. It thence travelled upwards to the vertex, never crossing the median line, but now and then a sudden, sharp pain would dart down the left side of the face. It continued generally from one to three or five days, and then would be superseded by a severe nervous headache, occurring about once in a fortnight, continuing for three days without abating, and leaving her, at the end of that period, in an extremely exhausted condition. Had some teeth extracted in the hope of getting relief, but all in vain. About six months ago, the pain changed its seat suddenly, and appeared at a point directly in front of the right ear, where the portio dura of the facial gives off its ascending, transverse and descending branches. Since that time, the neuralgia has been entirely confined to the ear itself, and a small space in front and behind it. Complains of a con-