EXTIRPATION OF THE PAROTID GLAND.

By F. H. BRETT, Esq., F.R.C.S.

LATE SURGEON TO THE GOVERNOR-GENERAL'S BODY-GUARD, BENGAL;
SURGEON TO THE WESTERN OPHTHALMIC INSTITUTION, LONDON.

As a variety of glandular tumour of somewhat peculiar structure, and certainly of benign character in the incipient stage, but liable in the advanced stages to degenerate into a malignant ulcerating cancer, and sometimes melanosis, is the indurated enlargement of the parotid gland.

There can be no question that many of those tumours which have been extirpated from the situation of the parotid gland, have originated in the lymphatic glands, in one or more of them lying on its surface, and I have myself had occasion to remove tumours from the neck, arising, no doubt, in the lymphatic glands, and which belong to that class of tumours. But there cannot now be a question, both from the previous history, and from the undoubted testimony of many eminent surgeons, that the parotid gland has not only been the seat of the disease I am now speaking of, but that it has also been successfully extirpated, notwithstanding the opinion of Mr. Allan Burns* that it is impossible to be effected. The following case, which occurred to myself, must place the question beyond all dispute.

The patient was an interesting Indian female, seventeen years of age; the disease had commenced, five years ago, by an inflammatory swelling in the region of the parotid gland; an abscess burst, and continued to discharge for some time from the meatus auditorius. This subsided, but the swelling increased, and the abscess then obtained an exit by the parotid duct. On the cessation of this, the tumour rapidly increased, until it acquired such a size as to occasion great deformity, and to impede the function of deglutition, and voice, and it was attended with considerable pain; the integuments were perfectly healthy.

Some of our best surgeons deny the necessity of securing the carotid artery, whilst others, of equal celebrity, advocate the expediency of so doing. In the operation I am about to describe, the ligature of reserve was introduced under the carotid artery.

The tumour was then extirpated in the following manner: An incision was commenced through the integuments and platysma-myoides by two semi-elliptical incisions, extending from the zygomatic process to the inferior part of the tumour, and with a little dissection the whole of the tumour was exposed. The lateral attachments were dissected, and the tumour was laid hold of and detached from its firm connexions, a great part of which was effected by the finger. The hæmorrhage thus far was but slight, the few vessels which were wounded being easily secured at the moment they were divided, and nothing of moment occurred until the dissection was carried to the deep attachments, at the base

where it encircles the artery; at this point, in an instant, the patient was almost deluged in a torrent of blood, chiefly from the external carotid. She swooned, and an involuntary discharge of urine and feces took place. In a moment, the ligature under the common carotid artery was secured, which was instantaneously followed by cessation of the hæmorrhage. The patient shortly after revived from the syncope, and completely recovered, without any recurrence of hæmorrhage. The dissection clearly exposed in this case the posterior belly of the digastricus, the transverse processes of the cervical vertebrae, the mastoid process and meatus auditorius, on the one side, and the angle of the inferior maxilla, with part of the masseter muscle, on the other, and the hyoid and pterygoid processes were distinctly felt. The wound completely healed, chiefly by adhesion, and partly by cicatrization, and the girl presented herself to me some months afterwards, in perfect health. I was assisted in the operation by Mr. Corbyn, garrison-surgeon of Fort William.

The structure of the tumour was partly glandular and partly of an indurated scirrhus character, having several small cysts throughout its substance, containing purulent matter. The lobules of the parotid were quite distinct, and its figure and superficies entire and well defined. The circumstance of the early abscess discharging itself through the parotid duct, taken in conjunction with the other particulars of the history, appears to me clearly diagnostic. The tumour was examined by Dr. Goodeve and myself, and that gentleman has preserved a preparation of it in the Calcutta Medical College.

Branches of the portio dura of the seventh pair of nerves were necessarily divided, in consequence of which there was paralysis of the muscles furnished by these branches of the moto-respiratory nerve.

Remarks.—From this and other instances which have been recorded of the removal of this gland, it would be absurd to entertain further doubt upon the question. Mr. Allan Burns, in his able work on the Surgical Anatomy of the Head and Neck, states that the operation is impracticable, from the connexions of the gland. He tried the extirpation on the dead subject, but found this substance so niched into every interstice around that he could not succeed, and he is of opinion that those who have supposed they have extirpated the parotid gland, have mistaken that conglomerate gland which lies imbedded on its substance, and which does sometimes become enlarged. Bell observes, that cutting out completely the parotid gland is quite impossible, since the greatest of the branches of the external carotid—viz., the temporal and internal maxillary—lie absolutely imbedded in the gland. Sir Charles Bell states, that he assisted his brother at an operation of this kind, where the whole gland was diseased, and in which it was deemed requisite to place a ligature round its base, where it encircled the artery. Quain also, in his work on Practical Anatomy, says, that it is impossible, in the living subject, to dissect out the body of the gland and its various and deep-seated processes.

In the *Medico-Chirurgical Transactions*, (vol. vii. p. 112, and vol. viii. p. 582,) a case is recorded in which the parotid was entirely removed by Dr. Goodlad. The patient, it appears, died. Mr. Carmichael (*Transactions, King's and Queen's College*, vol. ii. p. 101) also removed a large tumour involving the parotid, and connected with the transverse process of the atlas, the basis of the skull, the meatus auditorius, mastoid process, and angle of the jaw. This case terminated successfully. Klein also removed an enlarged parotid with success. It has been extirpated three times by Professor Wernhold, of Halle, and by Professor Beclard. Besides these, I might add the operations of Dr. Mott, Lisfranc, and other surgeons, attended with various results, and some, I fear, unjustifiable, when in the ulcerated stage, and accordingly hopeless; but the dissection of some of these tumours, especially that of Lisfranc, in the French Academy, leave no doubt that they were really tumours of that gland. The result of all this evidence is, that, if early undertaken, a painful death is prevented, and also, that the hæmorrhage was so extensive in almost all these cases, as to render it highly necessary, for the preservation of the patients, that the carotid artery should be secured by ligature. Also, in this formidable, though practicable operation, we must not forget how the diseased gland is bound down by the platysma-myoides, and by a condensed cellular sheath or fascia; its abundant supply of blood, and its intimate connexion with large bloodvessels; its vicinity to the cervical nerves and to the portio dura; nor may we overlook its deep attachments, and its processes, imbedded between the bones.

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* Vide Classification of Parasitic Growths, in the India Journal of Medical and Physical Science.