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THE BUCCAL CAVITY,

SUCCESSFULLY REMOVED.

BY

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EDINBURGH: PRINTED BY OLIVER AND BOYD.

MDCCCLXIX.

Reprinted from the Lancet, May 29, 1869.

CASE OF TUMOUR IN THE PTERYGOID FOSSA SUCCESSFULLY REMOVED.

MARGARET B——, aged sixty, was recommended to my care by Sir James Y. Simpson, and admitted into the Chalmers Hospital on the 5th October 1868.

History.—The patient states that seven years ago she observed a swelling along the lower border of the jaw in front of the angle, and a fulness in the region of the parotid upon the right side. These swellings, which seemed to be independent of each other, were most marked when the mouth was closed, and diminished when opened. When first observed, the patient experienced no uneasiness. Under the impression that they were simple glandular swellings, for the time being she gave no particular heed to them. About six months afterwards she noticed a swelling which bulged into the buccal cavity, on the level of the molar teeth, and extended as far back as the soft palate. Since that period up to the present time the whole of these swellings, cervical and buccal, have steadily increased; the enlargement gaining most towards the mouth, least in the submaxillary region.

Present condition (*Oct. 5th*).—There is a well-marked tumour in the carotid and submaxillary region, obliterating in the former the sulcus between the jaw and the sterno-mastoid muscle, and occupying the whole digastric triangle beneath the maxilla. These swellings are deeply seated, are separated from each other in the situation of the angle of the jaw, and offer a resistance quite like that of the parotid and submaxillary glands. On opening the mouth, nothing but the rounded surface of a large tumour is seen, immediately behind the teeth, hiding the fauces posteriorly and concealing the tongue from view. This tumour obviously springs from the right side; it presents an elastic resistance, almost fluctuating in its character, at its most prominent point. The mucous membrane, by which it is covered, glides smoothly over the surface. On pressure outwards, the tumours in the parotid and submaxillary regions become increasingly prominent. Deglutition and mastication are impeded—mastication so much so that some time since she was obliged to have all her

teeth on the affected side extracted to afford relief. More recently, respiration has become involved; and at night she is frequently obliged to sit up on account of the threatened attacks of suffocation. The difficulty in deglutition commenced more than two years ago, and at that time she consulted two surgeons of great eminence, each of whom refused to interfere, and cautioned her against permitting anyone to operate upon her.

Diagnosis.—I expressed my conviction that the tumour was simple in its nature, that it commenced in the pterygoid space, and had gradually developed itself in the direction of least resistance—*i.e.*, inwards towards the mouth and throat. That the swellings on the external parts, in relation with the base and ascending ramus of the jaw, were simply the parotid and submaxillary glands displaced and rendered unnaturally prominent. The grounds upon which I arrived at this opinion were: 1*st*, the slow growth of the tumour; 2*d*, the non-implication of neighbouring structures; 3*d*, the entire absence of all cachexia. To make my assurance upon this matter absolute, I thrust a large trocar and canula into the most prominent part of the buccal aspect of the tumour, and, having withdrawn the trocar, employed the canula to cut out a portion of the soft substance of the fleshy mass. I found this to be composed entirely of a fibrous stroma, enclosing minute nucleated cells and nuclei, in the form of rounded masses. The tumour was thus shown to be a simple granular tumour, analogous to those met with in connexion with the mammary gland, or within the parotid fascia, or in the substance of the prostate.

7*th Oct.*—An angry, diffused, mulberry-coloured redness has suffused the surface of the tumour in the neighbourhood of the puncture. The parts are swollen and tender; deglutition and respiration are more interfered with; the whole right side of the neck and face is painful; the pulse is accelerated, and the general temperature raised. Desired to foment the mouth with hot water.

17*th Oct.*—All tenderness has subsided, and all the redness is gone, except that part produced by blood extravasated beneath the mucous membrane covering the surface of the tumour. Having placed her deeply under the influence of chloroform, I proceeded to operate in the following way:—Dividing the lower lip from the prolabial edge to the mental prominence, and sweeping the knife from that point, I terminated the incision midway between the angle of the jaw and its articulating process on the right side. The labial and facial arteries were at once secured, and the soft parts dissected up on the right side as far as the situation of the bicuspid teeth. The lower jaw was now divided with the saw in the bicuspid region, and the knife, carried along its inner side, divided the insertion of the mylo-hyoid and internal pterygoid muscles. The base and angle of the jaw were now readily turned outwards at right angles to the zygoma, so as to expose the pterygoid region and the whole extent of the external and anterior surface of the tumour as far as the angle

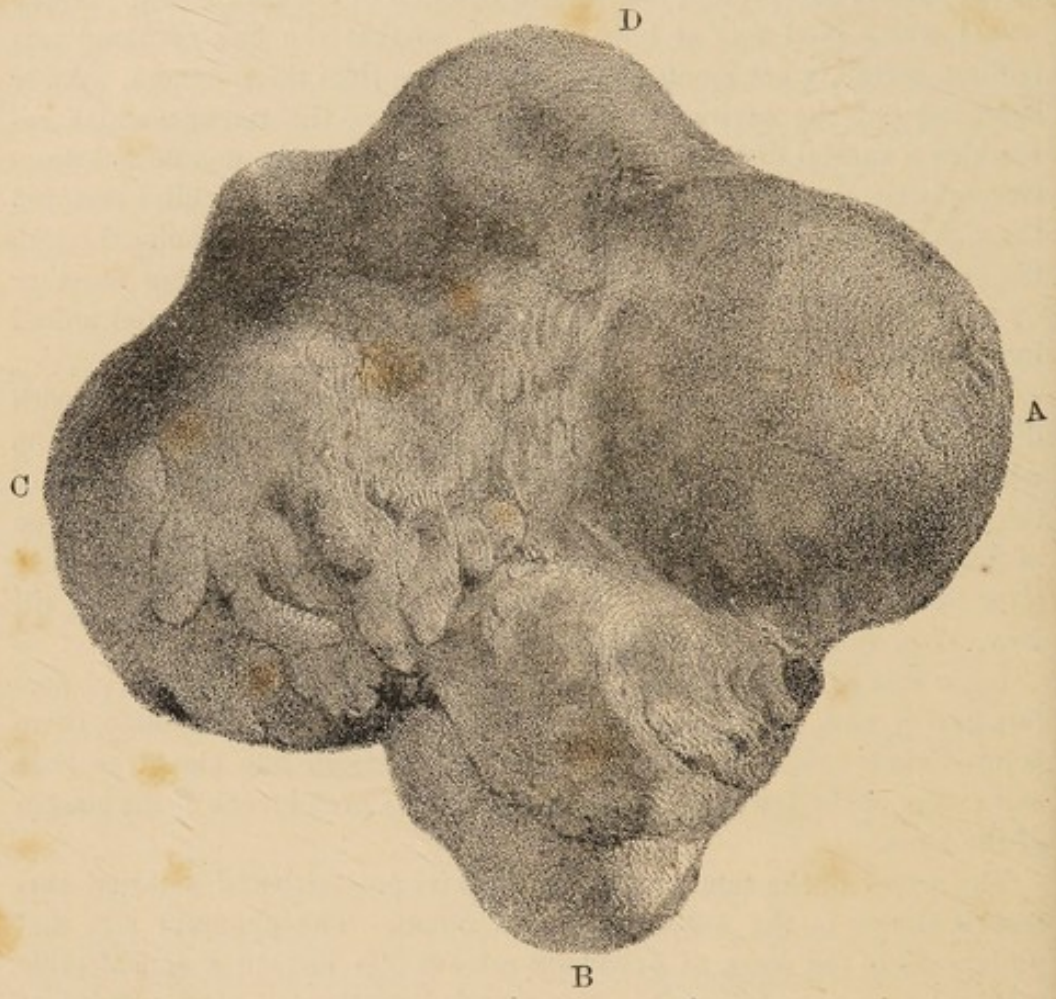
of the jaw. I then divided the mucous membrane covering the tumour, from the palato-glossus to the exposed part, cutting through some fibres of the internal pterygoid which remained undivided upon the surface. In less time than the description of the operation has already occupied, I completely detached the tumour from all its surroundings. In doing so, I exposed, as in a dissection, the tonsil, the palato-pharyngeus and constrictor of the pharynx, the internal carotid artery, the eighth nerve, the internal jugular vein, the ninth nerve, the terminal branches of the external carotid artery, and the inferior division of the fifth nerve. Every vessel which bled was at once secured, so that the loss of blood was trifling, certainly not amounting in all to more than three ounces. After sponging out the cavity left by the removal of the tumour, which resembled a careful dissection of the parts external to the middle and superior constrictors of the pharynx as high as the base of the skull, I restored the right ramus of the jaw to its position, and, piercing two holes through the base of the bone on each side of the saw section, tied them together by means of silver wire. The soft parts were then adjusted, and united by means of wire sutures.

The after-treatment consisted simply in washing out the mouth with dilute Condy's fluid, and feeding the patient upon fluid nourishment. The whole external incision, except one point corresponding to the angle of the jaw, healed by the first intention. From this aperture a free escape of fluid employed to rinse the mouth occurred during the first week, but after this it healed rapidly. The patient was retained in hospital till Nov. 17th, and was then dismissed quite well.

I saw this patient a few days ago (April 12th). She was then in perfect health, and, except the line dividing the lower lip in the middle, there is no obvious evidence of the operation, the incision line along the base and ramus of the jaw lying concealed under the prominence of the margin of the bone.

The aspect of the tumour, as seen from its posterior and external surface, is shown in the accompanying woodcut. The apparent size and plumpness of the mass, as originally removed, is lost, to a considerable extent, by soaking in spirit. The rounded portion, A, corresponded to the deep parotid region, B to the submaxillary, C to the pharyngeal, and D to the palatal. The opposite surface presented a uniform and smoothly rounded surface, with one large and prominent elevation in the anterior part of the central bulge. The surface of the tumour was smooth and glistening; the general fibrous capsule loose and filamentous. The mass of the tumour was composed of lobes (A, B, C, D), and these again of lobules or leaflets, in some portions closely resembling the external aspect of the cerebellum. These lobules were soft and easily lacerable under the fingers, and were composed entirely of filamentous tissue, together with glandular structure cells, and nuclei arranged in circular and ovoid masses, in alveoli composed of delicate fibrous interlacements.

So far as I have been able to learn, no case of simple tumour occupying this situation, and growing inwards towards the throat, has ever before been placed on record. Similar tumours developed in connexion with the parotid, under the parotid fascia, displacing or causing atrophy of the parotid gland, and bulging externally from behind the ramus of the jaw, are sufficiently common, and have frequently been removed.



They, in fact, constituted those parotid tumours, as they were called, in the removal of which our forefathers conceived they cut out the entire parotid gland.

Medullary tumours occupying this site, invading also the buccal cavity, rapidly involving all neighbouring tissues in one confused cancerous mass, and proving fatal usually by ulceration and repeated hæmorrhage, are not uncommon objects of pity, but afford no opportunity for surgical interference.

The case further seems to have eluded the acumen of the gentlemen previously consulted, who obviously regarded the disease as of a malignant kind, certainly as quite unsuited for operative treatment.

The method of procedure was also, I believe, quite novel for the purpose of removing a tumour. A somewhat analogous mode of operation was, some years ago, recommended by the late Mr Guthrie,* as a preliminary to ligature of the internal carotid upon the level of the tonsil, and above that point; though, so far as I am aware, it was never carried out in actual practice in the way he describes.

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* Commentaries on the Surgery of the War in Portugal, Spain, France, and the Netherlands. By G. J. Guthrie, F.R.S. Fifth edition,'1853, p. 248.

EDINBURGH: PRINTED BY OLIVER AND BOYD, TWEEDDALE COURT.