CASE OF

RESECTION OF THE SCAPULA.

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Received May 8th—Read June 13th, 1848.

WILLIAM HERMON, æt. 33, was admitted into King's College Hospital, January 13, 1847. He had served as a soldier in various parts of the world; and had suffered from disease of the right shoulder joint for about seven years, when he was sent to Fort Pitt Hospital, where the extremity was amputated* at the articulation, and a portion of the glenoid cavity was removed at the same time. He made a good recovery from the operation and improved in health; but the wound never entirely healed. About twelve months ago an abscess formed on the front of the chest on the same side, which was attended with great swelling both in the stump and the lower part of the neck.

At present the affected shoulder is considerably larger than the other, all the soft tissues being involved in the swelling. There is a line of a cicatrix reaching from opposite the point of the acromion process to the lower and back part of the axilla, with several openings in it. Over the clavicle, on the back of the scapula, in the pectoral region in front, and in the cicatrix, there are altogether thirteen openings on the surface, eleven of which communicate with bare bone.

* By Staff-Surgeon Williamson. Vid. Medical Gazette, vol. xxxvi. 1845, p. 812.

The patient has a slight cough, but is otherwise in fair health. He is tall but spare in figure, and has the appearance of one who has long suffered from disease. There is a constant discharge from most of the openings; and, although he has no great positive pain, he feels exhausted by the continued irritation arising from the diseased state of the shoulder.

This patient was sent to me by my friend Mr. Barker, of Wantage, who entertained the opinion that nothing less than the removal of the whole scapula would suffice for a cure. At first sight I could not fancy that such a formidable proceeding was requisite; and it was only after a very careful study of the case that I came to the conclusion that such an operation was the only course which promised any hope of relief.

With the patient's concurrence I accordingly carried our views into execution, on the 6th of February 1847; and the operation was conducted thus:—Whilst he was under the influence of ether, and in a semi-recumbent position, an incision was made through the skin over the outer half of the clavicle, along this bone, as far as the acromion, and the tissues were so separated as to permit a bone spatula—the end of an ordinary paper cutter—to be passed under the clavicle about two inches from its outer extremity. This being done, the bone was divided with a saw; next, the skin was divided along the spine of the scapula from the acromion to near the base, when, with a large clasp bistoury, an incision from eight to ten inches in length was made, downwards from the acromion, in the course of the original cicatrix. The skin and some thickened tissue beneath were now raised for some distance from each side of the wound, when, by a special dissection, the outer end of the clavicle with the acromion and coracoid processes of the scapula were thoroughly liberated, so as to permit them to be grasped in the left hand. The mass, consisting of the scapula and its thickened coverings, was then pulled outwards from the side, and the knife was used to sever the stretched tissue between the subscapularis

and serratus magnus muscles. The attachment of the trapezius to the scapula was then divided, as were also the scapular ends of the serratus magnus, levator anguli scapulæ, and rhomboidei, when by a few additional incisions the shoulder blade and the proper scapular muscles were separated from the body. The subclavian artery was compressed over the first rib, and very little blood was lost during the operation. The axillary artery, which had remained patent until near the cicatrix of the original wound was divided, was secured with a ligature, as were also several vessels of minor importance. The edges of the wound were then brought together and united by stitches. Lint, wet with cold water, was then applied over the surface, and the patient was carried to bed, scarcely aware of what had been done.

It would be tedious on such an occasion as the present, and in some respects of little value, to narrate the particulars of the after progress of this case during the patient's stay in the hospital. Suffice it to say that he suffered comparatively little from the operation; the symptomatic fever did not run high; and the weakness left from the operation, fever and subsequent profuse discharge, were not greater than might have been anticipated.

On the tenth day all the ligatures came away. In two days more some sloughs of the thickened subcutaneous tissue, which had been left at the operation, separated; healthy granulations and suppuration soon followed, and the open surface gradually diminished in size under the ordinary dressings.

By the 10th of March he had sat up a short time daily, and on the 5th of May 1847 he was sent down into the country. The wound had not entirely closed, but in every respect he was in better condition than when he came to town.

On the 4th of April 1848, I heard from Mr. Barker, of Wantage, to this effect:—"I have seen Hermon this morning; he remains quite well and fat. We have been teased with occasional small abscesses in the breast, but they are entirely

unconnected with the remaining portion of the clavicle. The openings required for these had the peculiar appearance of strumous sores. The hypertrophy of the soft tissues is now nearly gone, the lungs remain sound, and the case is in every respect successful."

A cast of the shoulder was taken before the operation, which shows the bulk of the parts at that time. One was also taken of the mass which was removed, which shows the thickened state of the soft tissues connected with the scapula. Finally, the bone was cleaned by maceration, and its hypertrophied condition gives good proof of the chronic inflamma-

tory action which had been present so long before its removal. That portion of the glenoid cavity which had been left when the arm was amputated is in a state of caries, the margin of the cavity is surrounded by a mass of new ossific matter, and the lower part of the neck has numerous rough spiculæ projecting from it.

In almost every part of its extent the scapula is thickened and hardened in texture,—changes which are particularly remarkable on the coracoid process, the spine, and the acromion. The portion of the clavicle which was removed partakes of the general condition of the scapula, but there is no appearance of caries upon it.

At the time when this operation was performed, there was a double interest connected with it. It was one of the most formidable and severe as yet effected under the influence of ether, and it was supposed to be the only case of the kind, as a surgical proceeding, which had occurred in this country. The interest connected with the anæsthetic agent has now in some degree passed away; but, in so far as I am aware, the case is still peculiar as one of rare occurrence, and it is chiefly for this reason that I have presumed to bring it under the notice of this society. In various modern surgical works, cases are detailed or referred to wherein portions of the scapula have been removed, either during amputation at the shoulder-joint, by excision of the articulation, or for disease of the bone elsewhere. These proceedings have involved small portions, (such as the spine, acromion process, or glenoid cavity, all of which I myself have removed in different cases,) or as much as three-fourths of the bone. In some instances, the whole of the bone, with a portion or the whole of the clavicle, has been taken away, in consequence of secondary disease, after amputation at the shoulder-joint. In other examples, the upper extremity and bones of the shoulder have been removed simultaneously; and doubtless the surgeons, (Cumming, Mussey, M'Clellan, Gaetani Bey, Rigaud, and Gilbert,) who have resorted to those proceedings, have been encouraged to anticipate success by judging of the

favourable issue of the various examples which have been recorded, wherein the upper extremity, including a portion or the whole of the clavicle, has been torn away by machinery.

In contemplating such an operation for my patient, I felt that there was no want of precedent. In fact, the case related by Rigaud,* of Strasbourg, is in most respects analogous; and the chief point to decide was, whether, under all circumstances, such a formidable proceeding should be resorted to. Three years had elapsed since the arm was amputated at the shoulder-joint; the patient had suffered more or less ever since; and, latterly, the swelling had increased, as had also the discharge, while his health seemed gradually to decline. At an earlier period an operation would probably not have been advisable, as there was a chance of the disease ceasing spontaneously. Further delay seemed passing over the most favourable opportunity for such a proceeding. At one time I was in hopes that, by a partial resection, I might get away all the carious points. A glance at the macerated bone might countenance such a project; but the great enlargement of the soft parts, as well as the numerous sinuses, induced me to adopt the steps which I have detailed. The sloughing of portions of the indurated mass which was left at the operation, and the subsequent strumous abscesses which formed in the remaining parts, perhaps sufficiently prove how much more severe the after consequences would have been, had I left behind any portion of the bone or of the structures with which it was closely invested.

* Comptes Rendus, vol. xix., 1844.