any murmur, none being audible upon frequent examination. Examined by the microscope, the muscular fibre did not appear to have undergone fatty degeneration. The lungs were healthy. On opening the abdominal cavity, the appearances were presented of encephaloid cancer of the peritoneum, complicated with ovarian cancer, such as is described by Rokitsky in the second volume of his work on *Pathological Anatomy*.

ON A CASE OF TRAUMATIC AXILLARY ANEURISM.

By WALTER RIVINGTON, M.S. Lond., F.R.C.S. Eng.,

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ROBERT HUNTER, aged 70, was admitted into the London Hospital under my care on Wednesday, May 10th, 1871. He gave the following history. On the previous Saturday, May 6th, he fell out of a cart, alighting on the side of his head and his left shoulder. His arm was fixed and powerless immediately after the accident, and continued so until treated. On the following Monday, he applied to a surgeon at Ilford, who told him his "shoulder was out;" and who reduced the dislocation by extension with his foot in the axilla. The reduction did not take a long time, and was effected without much pain. He never had anything the matter with his arm before.

When he came to the hospital on the 10th, he walked into the receiving room, undressed himself, and used his left arm and hand. He was carefully examined by Mr. H. Leapingwell, the house-surgeon, who could discover nothing but considerable swelling around the shoulder-joint. He was then taken in, and seen by myself on the following day. On hearing the history, which included a statement subsequently proved to be erroneous, that the surgeon had kept his slipper on while effecting reduction of the dislocation, I remarked that cases were related in which the axillary artery had been ruptured under the like circumstances; but that in the present instance the symptoms did not seem to warrant that conclusion. These symptoms were the following: considerable swelling of the shoulder, especially at the outer side, with œdema of the hand, and some swelling of the rest of the limb; the pulse beating at the wrist with the same force and frequency as on the right side; ecchymosis extending down from the axilla along the side of the chest; the skin over the axilla and shoulder natural and not discoloured; no pulsation whatever to be felt at any point of the swelling; fluid, and probably, as I stated, blood in the shoulder-joint; power on the part of the patient, as well as of the surgeon, of bringing the arm to the side; absence of a distinct tumour projecting the pectoral muscle; presence of a small hard lump, of the size of a pigeon's egg, at the base of the axilla on the inner side of the situation of the axillary vein, receiving no impulse whatever from the axillary artery. My diagnosis was effusion of blood, in all probability from the smaller vessels, perhaps from the vein; and I directed that the arm should be bandaged and kept fixed to the side, in order to maintain it at perfect rest, and to give the best chance of obtaining absorption. At the same time, I remarked that, considering the advanced age of the patient, absorption would necessarily be slow, and, if this object should not be obtained, the case was in all respects unfavourable for the success of any operative interference. Up to the end of the month I saw the case regularly, and noticed a considerable improvement. The ecchymosis on the side of the chest altogether disappeared, the swelling of the arm was reduced in size, and, if there was not much appreciable diminution of the swelling round the shoulder-joint, there was no enlargement of the hard lump in the axilla, nor anything that appeared to me to indicate a necessity for interference.

A day or two afterwards, I was obliged to give up the care of my patients on account of ill-health, and I left town for a week or ten days, intending, when I returned, if I did not find any improvement in my patient's condition, to consult my colleagues about him. Circumstances rendered it desirable for me to prolong my stay; and, being fully occupied, I naturally ceased to think about the case, nor did I hear anything more of it until my return to town towards the end of June, when a notice of consultation about a case of axillary aneurism reached me. Having an engagement, I could not go down to the hospital; but I learnt that the case was my own, and that the patient and his friends objected to any operation. On returning to the hospital at the end of June, I examined the patient, and found the following condition. The swelling round the shoulder-joint had greatly increased in size, and assumed a more defined shape; it projected the pectoral muscle in front, and the latissimus dorsi behind; there was pulsation in the swelling, and a distinct *bruit* was audible just below the clavicle; the radial artery was still perceptible at the wrist; the arm and hand were more swollen than before, and the former was inclined at an angle to the trunk, and could not be brought to the patient's side; the skin over

the tumour was red and threatening ulceration, and the hard lump had disappeared from the base of the axilla, fluctuation being now perceptible. I stated to my house-surgeon, Mr. Thornton, that since I had last seen the case very marked changes had occurred, and that I had no doubt that on inquiry it would be found when these changes began. From the notes with which Mr. Thornton subsequently furnished me, I ascertained that the swelling in the axilla began to increase in size about June 10th, and that it went on steadily increasing for a fortnight. Very soon after this increase began, the patient felt for the first time a throbbing sensation in the axilla, which gradually became more perceptible to himself, until it amounted to what he called a "jumping" sensation. The part also became more painful—so much so that he complained of it to the house-surgeon and to Mr. Reeves. The latter, suspecting an aneurism, called Mr. Maunder's attention to it on June 20th. Mr. Maunder found a *bruit*, and diagnosed a traumatic axillary aneurism. On June 24th, a consultation of some of the surgical staff was held at 2 P.M., and three proposals were discussed; viz., to tie the subclavian, to cut down and tie the artery at the seat of injury, and to amputate. The last procedure appeared to those best qualified to judge to offer the fairest prospect of recovery to the patient at his advanced age. The steady refusal of the patient himself to submit to any operation put an end to the discussion.

On my first visit to the patient after my return to the hospital, I stated to him and to his friends the great danger in which he was placed, and strongly urged them to let us interfere. I told them that in a very few days the tumour would burst, that there would be a great gush of blood, and perhaps immediate death. Remonstrances were useless, so I gave instructions to my house-surgeon that if hæmorrhage came on he was at once to send for me; to use all the means at his disposal to arrest the hæmorrhage until my arrival; and, if he found that he could not stop it by ordinary pressure on the part or on the subclavian, not to hesitate in drawing down the skin over the clavicle, and making an incision through the skin and fascia, which would allow him to introduce his finger and directly compress the artery. I remained at home, ready to go to the hospital at any moment. The condition of the parts now became rapidly worse; increase of pain, increase of throbbing sensations, increase of the œdema, increase of the tumour itself. On the 24th, the circumference of the left shoulder was twenty-four and a half inches, and of the right fifteen and a half. On the 26th, the swelling had increased to twenty-five inches, and by the end of the month to twenty-six. By the 28th, the most dependent part of the tumour had assumed a dusky red colour, and constant oozing of a sanguineous serum took place from the posterior surface.

During the next four days, the under surface of the tumour gradually deepened in colour, and ulceration commenced at two points. The largest ulcerating opening was about the size of a sixpence, and placed at the lowest part of the anterior surface; the other patch was more posterior, and only visible on raising the patient.

On July 6th, the greater part of the lower surface of the tumour had acquired a dark red colour; a portion of clot could be felt through the larger opening, from which a constant oozing of reddened serum was taking place. The patient still declined to submit to interference.

On Friday, July 7th, at 7 A.M., the house-surgeon was called to the case in consequence of hæmorrhage. The amount of blood lost did not exceed a couple of ounces, and the bleeding had entirely ceased before the house-surgeon arrived. At this time the house-surgeon would have sent for me, but the patient and his daughter, who happened to be in the ward, positively resisted operative treatment, although repeatedly warned of the danger of delay. At 2 P.M., the house-surgeon was again called to the patient, whom he found in a state approaching that of collapse, caused by a sudden gush of blood to the extent of at least ten or twelve ounces. On his arrival, blood was still trickling from the axilla, but not excessively. To arrest this a large plug of cotton-wool saturated with perchloride of iron was thrust into the opening, and a pad of lint was placed over this; and by these means the hæmorrhage was completely arrested. The house-surgeon was about to send for me, when Mr. Maunder arrived at the bedside, and having made some inquiries about the case, took the responsibility of the subsequent proceedings. An operation was performed, and the patient died in less than half an hour after its completion. On my arrival at the hospital at 4 P.M., I found my patient dead; both pectoral muscles completely divided, the brachial plexus and axillary vessels laid bare throughout their course below the clavicle, and the axillary artery tied in the third part. The ligatures were an inch apart, and between them was a large branch coming off from the main trunk.

The further history of the case assumes an interest in relation to professional ethics. On arriving at the hospital, I was assured by my house-surgeon that he had complete control over the bleeding, which had entirely ceased when Mr. Maunder arrived; that, on being asked

whether he wished Mr. Maunder to interfere, he said he did not; that on being still further pressed by Mr. Maunder to say whether he had any objection to his interference, he said that, if Mr. Maunder interfered, he must do so on his own responsibility. He had received instructions to send for me, and he was going to act upon them. With regard to these statements, I may say that I believe them to be perfectly truthful, and that, on the other hand, I was at that time quite willing to believe that Mr. Maunder had acted for the benefit of the patient. At all events, I should have regarded the matter in this light, but that on the following morning my house-surgeon showed to me a letter which he had received from Mr. Maunder, requesting to be furnished with the notes of the case and the specimen of ligatured artery, without making the slightest reference to my own wishes on the subject. I therefore wrote a note to Mr. Maunder, stating that he could see the notes of the case when I had finished with them, but that he could not have the specimen; at the same time, I asked him if he would kindly let me know whether any necessity existed for my instructions being set aside. The answer to the note came through the lay authorities at the hospital. At the beginning of the long vacation, I was asked to meet two prominent lay governors, and then found that I had been accused by a colleague, whose name was withheld, of some professional delinquencies, the nature of which was not made clear to me. The whole communication was so vague, that I had no means of discovering of what it was that I was accused. At that time, therefore, I did not attach much importance to it, but I determined to treat it with the contempt it deserved. I learnt, subsequently, that the charges were of a really serious kind—that I had been denounced as incompetent; that some of the lay authorities had carried these charges to two of the senior members of the staff, men of the highest honour and integrity; and that these charges had been investigated, so far as they were capable of investigation without reference to the accused surgeon, and were found wanting in the elements which would satisfy a jury. Nevertheless, so much prejudice was created by the denunciation by a great operator of his more obscure colleague, that the proposal was seriously entertained that at the annual re-election of officers to the London Hospital I should be quietly dropped out of the staff, and this on an *ex parte* statement made behind my back by one who had taken a mean advantage of his acquaintance with a member of the House Committee to endeavour to oust from his appointment a gentleman with whom he was personally at variance, and in whose dismissal he was professionally and pecuniarily interested.

Time brings the truth to light. At a recent court of inquiry held at the London Hospital on my professional conduct, owing to a repetition of the course of action pursued against me, one of the charges proved to be that I had treated an aneurism as an abscess. The only evidence which could be offered was, that some one had ordered a poultice to be applied to the shoulder. What my views really were, I have stated in the preceding narrative of the case; and I may add here that, wishing to obtain absorption of the effused blood, I had, of course, abstained from ordering warm applications, and I had equally abstained from ordering ice, in order that I might not lower the vitality of the skin of an aged patient.

Writing now with the piece of artery before me, and with the full light of the whole history of the case, I find it difficult to determine whether the vessel was ruptured in the first instance, or whether it was severely bruised and subsequently gave way. At the outset, the swelling of the shoulder was in no wise greater than I have often seen in other cases of injury in the same region. The opening in the artery is of a valvular character, occupying about one-third of its calibre, and it is pretty certain that, if torn at the time of reduction of the dislocation, it was plugged by the clot which formed, and was felt by myself at the base of the axilla opposite the injured spot. Those who have a real acquaintance with these injuries know how rare they are, and how peculiarly liable practitioners are, either to consider that there is a ruptured artery when none exists, or to believe that it is not injured when it has really been so. In proof of these positions, I would refer to a very valuable paper by Mr. Callender in the *St. Bartholomew's Hospital Reports*, and also to a paper most pertinent to the subject in the *BRITISH MEDICAL JOURNAL* of the 6th of January last, from the pen of Mr. Campbell De Morgan. The view which I took in this case was similar to that which Mr. De Morgan adopted, more correctly, in his own. I believed that I had to do with a simple, though copious, ecchymosis, and I hoped that by perfect rest the blood would gradually be absorbed. I thought, as he did, that "it was not the axillary which was implicated, as the radial pulse was natural, and there was no pulsation, which generally, but not universally, attends the blood-tumour formed through the rupture of a main vessel."

Now, although not convinced, yet I am perfectly willing to admit that I formed a wrong diagnosis of the case. Granting that, was I

wrong in my treatment, not to interfere in such an unfavourable case until interference became really necessary? It was stated to the lay authorities that I had improperly delayed an operation for a month, and it was with reference to this case that the complaint was made; and the operation, which it appeared that I ought to have performed at once, was to ligature the subclavian artery. Had this been done at the end of May, the patient would not have lived for forty-eight hours. As it was, he lived till the 7th of July. Let me once more quote Mr. Campbell De Morgan's paper: "Now we know very well that, so long as the skin is sound and the air does not reach the contents of the bag of effusion, all may subside without any unpleasant consequences. We have had within the last few years two or three cases of simple fracture, where there was large and rapid effusion of blood beneath the skin, with marked aneurismal pulsation, in which, however, arrest of the hæmorrhage ensued spontaneously and complete absorption took place, although it was clear that a large artery had been torn through. In the present case, then, I hoped that by the means adopted we might get cessation of bleeding, coagulation of the blood already effused, and ultimate absorption." "Seeing how favourably cases of subcutaneous hæmorrhage will terminate, even when we are sure that a large artery is involved, it is not good surgery to lay open at once a large cavity containing blood; still less would it be right to lay open these cavities hastily when there is no evidence of an artery being wounded at all."

There are two distinct lines of surgery—the one characterised by great caution and careful selection of cases; the other by a disregard of the condition of the patient and attention only to the narrow rules of mere operating practice. To follow the latter course is easy, and to condemn those who choose the former is easier still. Easiest of all is it to take advantage of a colleague's errors, and of personal acquaintance with lay authorities to misrepresent his actions and bespatter his reputation; but whether it is better to be the victim of calumny or the perpetrator, may be safely left to the candid judgment of the profession at large.

GUARANA A REMEDY FOR SICK-HEADACHE.

By SAMUEL WILKS, M.D., F.R.C.P., Physician to Guy's Hospital.

I WISH to draw the attention of the profession to *guarana* as a remedy for sick-headache, and at the same time to ask for the experience of those who may already have some acquaintance with the drug. My own knowledge of it dates about two years back, when, after the appearance of a lecture of mine upon sick-headache, I received a letter from Mr. Helmcken, of British Columbia, enclosing two powders which he recommended to me with much confidence as able to cure the complaint. He said that, having heard much of the remedy, "I resolved to try the medicine upon one of my patients who was always coming to me with sick-headache; and sure enough it acted like a charm; and in place of suffering for twenty hours or so, the headache had disappeared in a couple. This accords with what others have told me." Upon my first headache after the receipt of Mr. Helmcken's letter, I took the powder, but with only doubtful effect. I therefore did no more than casually mention the medicine to my friends, but did not recommend it. A few weeks ago, after the appearance of a second communication of mine in the *JOURNAL* upon the same complaint, I received a letter from Dr. Wood, of Montreal, in which he also recommended "*guarana*" as a remedy for headache, and gave a history of his own personal sufferings and the relief which he had obtained. He says: "By taking one of these powders and remaining quiet when I have felt premonitory symptoms by a beginning of pain always in the right temple (headache on the other side, or in any other part of the head, I never mind), I have carried off the attack; and, with the first box, absolutely put it off for two months—something which had never occurred in my life before." Upon so good an authority, I determined to try the remedy in a more systematic manner, and requested my neighbour, Mr. Hooper, the chemist, to procure me a packet of the powders. These I have recommended to several patients and friends; and the result is so encouraging, that I have hastened to suggest their trial to my professional brethren. One lady speaks most enthusiastically of their power, as she has now, on two separate occasions, had her headache arrested by their use. The drug has long been known, for mention is made of it in English and French pharmacologies, but appears never to have come into general use. It consists of the seeds of a tree growing in Brazil called *Paullinia sorbilis*; and these, according to Johnstone, in his *Chemistry of Common Life*, are used as we do cocoa. The seeds are ground into powder, and contain an alkaloid which is said to be identical with that found in tea and coffee. The medicine is manufactured by Grimault and Co., No. 7, Rue de la Feuillade, Paris.