The medical practice of the Crotoniat physicians, the disciples of Pythagoras, was such as to gain them the reputation, according to Herodotus, of being the best practitioners in Greece. They are reputed, however, to have shunned surgical operations.

We now meet, among the disciples of the Pythagorean school, with some of the earliest recorded traces of a special study of the structure and functions of the body; not of the human body, except by analogy; for you must again remember that the ancient prejudices against meddling with the bodies of the dead long presented an obstacle against the study of anatomy; and therefore, when in this lecture and in subsequent ones, until I shall have occasion to state otherwise, I speak of dissections, you must understand them to have been made on animals.

[*To be continued.*]

Original Communications.

THE MANAGEMENT OF THE PLACENTA.

By W. Newman, M.D.Lond., Fulbeck, Grantham.

So much of the ultimate safety of the patient in a case even of thoroughly natural labour, depends on the proper removal of the placenta, that I am disposed to offer some remarks on a mode of practice somewhat differing from the general routine taught in the schools, in the hope that the publication may not be without some advantage. I have for some years known and as constantly put in practice the plan I wish to mention. More than three hundred cases have passed under my notice during this time; and this number will probably be deemed sufficient basis for some practical conclusions.

The plan I adopt is as follows. After the expulsion of the child and the division of the umbilical cord, the patient still lying in the usual position on the left side, I at once carry my left hand over the right ilium, and so ascertain the condition of the uterus by manual examination through the abdominal parietes, without any delay.

Should the organ be thoroughly contracted, and the placenta fairly extruded from the cavity, it only remains to extract the mass with the right hand from the vagina.

If, however, the uterus be flaccid, uncontracted, and increasing in size, I immediately commence and keep up with the left hand firm yet not severe pressure upon the organ, until the progressive shrinking of its bulk induces the expulsion of the contained coagula, and the close compression of the placental mass. I then wait some five or ten minutes before any further means are resorted to.

Again, should the uterus be found on examination firmly contracted, embracing the placenta, there will not exist any necessity for immediate manual compression.

After, however, the lapse of the time above specified, I again examine the abdomen with the left hand, grasping the uterus, as already described. This is done whether the organ be firmly contracted or the reverse, whether the placental mass have in part or not in any degree descended into the vagina. I do not wait in anxious expectation for the extrusion of the mass by the uterus *suâ sponte;* nor, on the other hand, do I extract it from the uterine cavity by the employment of undue force; but I simply expel it from the interior of the uterus by external pressure, first exciting, then aiding, the natural action of the uterine walls. The placental whole is thus squeezed into the vagina with the coagula as yet mechanically detained behind it; thence I withdraw it, seizing it with the fingers of the right hand usually by a free edge, keeping up unremittingly with the left hand the same compression upon the uterus, until the complete removal is effected. I rarely make use of, and never trust to, the umbilical cord for the withdrawal of the placenta.

The advantages I believe to be thus secured, are:—

1. The certainty as to the actual state of the uterus.
2. The control thereby obtained over the quantity of blood poured out during the process of detachment of the placenta.
3. The ultimate attainment of complete uterine contraction.
4. The almost complete emptying of the uterine cavity from coagula, etc.
5. The much increased certainty that concealed or *post partum* hæmorrhage will not occur.
6. The absence of hour-glass contraction or undue detention of the placenta.

Objections will probably be raised to the carrying out of this plan, on the score of undue exposure of the person, and of the hazard that the requisite manipulation may inflict some injury on the uterine substance. I do not think that either of these objections should outweigh the increased safety of the lying-in woman; and I may almost say that they have hardly any foundation. The whole process may be carried on easily beneath the bed-clothes; and the amount of bruising and rough treatment which the already effete and comparatively insensible uterine structure will with impunity bear in cases of difficult version, may well lead one to ignore the possibility of injury from the simple and external compression.

Authors, as a rule, recommend patiently waiting until the placenta shall have passed into the vagina by unaided uterine effort, and then extracting the mass from that canal by gentle traction at the cord; while the application of external pressure through the abdominal walls is usually named only as a useful adjunct to other means in the treatment of flooding.

I would venture to suggest that the latter expedient be made in every-day practice the rule and not the exception; and the result will, I believe, prove the correctness of the opinion.

ULCERATION OF THE LOWER EXTREMITY OF THE RECTUM; ITS VARIETIES, DIAGNOSIS, AND TREATMENT.

By James Rouse, Esq., Assistant-Surgeon to the Westminster Ophthalmic Hospital, and Surgical-Registrar to St. George's Hospital.

Notwithstanding the numerous works published on diseases of the rectum during the last few years, there appears still to be great difference of opinion as to the best mode of treatment; more particularly with regard to those ulcerations situated on the mucous membrane lining the sphincter ani, and in the fossa immediately above that muscle.

There are three forms of ulceration of the lower extremity of the rectum, which give rise to very acute suffering; and, although they vary considerably in position, have nevertheless been described by most authors under the general head of fissure. It is proposed, in the present paper, to point out that three distinct forms of ulceration occur in this region, which, by ordinary investigation, may be distinguished from each other, and which require different modifications of treatment.

The most common form of ulcer found at the lower extremity of the rectum is that which is known as *fissure of the anus.* This disease does not seem confined to any particular period of life, though it rarely or ever exists until after puberty. It is more particularly common among persons who lead a sedentary life, and for the same reason it is rather more frequent in women than men. The fissure appears to be caused by a tearing of the mucous membrane lining the sphincter ani, by the passage either of hardened fæces, or of a foreign body contained therein. The following cases will, however, show that fissure of the anus may occasionally be the result of external violence:—

Case I. A gentleman, aged 24, was riding a restive horse, when it suddenly bolted. He was thrown, with some violence, on the hind part of the saddle before he recovered his seat. He felt some pain about the anus at the time, and, on changing his shirt, he noticed a few drops of blood. For the next few days he experienced a slight burning pain during the evacuation of the bowels, and in about a week the characteristic pain of fissure was established. On an examination being made, a small crack was perceived on the posterior surface of the sphincter; it commenced about two lines within the anus, and extended upwards for about half an inch. Various local means were tried without benefit, and an operation, to be hereafter described, was had recourse to with perfect success.

Case II. A captain in the navy fell off a ladder, and came to the ground on his buttocks, with considerable force. He did not observe any particular pain until he went to stool the following morning, when he experienced considerable smarting, and noticed that he had passed a small amount of florid blood. About a week after the accident, he applied for advice. He

then, after every evacuation of the bowels, had pain, which lasted for several hours. On examination, an ulcer was found on the posterior surface of the lining membrane of the sphincter; the edges were not indurated, and the surface was florid. An ointment, containing mercury, was applied twice a day; and in the course of a week a cure was effected.

Persons afflicted with this disease, in describing the origin of their suffering, frequently state that while straining violently at stool they felt something give way, and on looking at their evacuations, they noticed a small quantity of blood. It has more than once occurred to me to be told by persons with fissure, that the fæces were so hard that it was necessary to remove them with the fingers from the anus.

This crack or fissure is almost invariably situated on the posterior surface of the sphincter. I have seen upwards of a hundred cases, and in only six did the position vary; in three of these the fissure was situated on the perineal surface of the muscle, and all occurred in women; in two it was situated on the left side; and in one on the right. It commences about three lines from the margin of the anus, and extends upwards in a straight line to the extent, usually, of half an inch, though sometimes as high as the superior margin of the sphincter. If the fissure be seen within a week or ten days of its occurrence, it presents the appearance of a bright red line with a sharply defined edge, and does not appear to extend through the thickness of the mucous membrane. A little later, if no treatment be adopted, one or two florid granulations may frequently be seen protruding above the margin; and it is during this stage that a small amount of blood is voided on going to stool. This appearance is very soon changed; the edges become everted, and more or less hard, and the surface of the ulcer itself looks excavated and pale, like any other indolent sore. The pain caused by this solution of continuity is at first trifling, and only exists while the motion is passing; but it soon becomes most severe. It usually commences about half an hour after the bowels are relieved (the sensation up to that time being only uneasiness), and continues for five or six hours. As the disease progresses, the pain becomes more continuous and easily excited, and even walking or sneezing will bring it on. At this stage, the ulceration is found to have extended through the submucous cellular tissue into the fibres of the sphincter; there is a constant desire to pass urine, a serious addition to the other suffering, and this continues until relief is obtained by means of an operation.

This second form of ulceration is situated immediately in front of the os coccygis, and was first described by Sir B. Brodie, in a clinical lecture delivered at St. George's Hospital. This ulcer, which is almost invariably coexistent with an enlarged and varicose state of the veins about the rectum, does not, like the one just described, appear to be caused by a tearing of the mucous membrane, but by an injury done to it or to the submucous cellular tissue. It seems as if the forcible passage of the fæces (in these cases always very much hardened), and the pressure caused thereby, produced a small slough of the mucous membrane. Mr. Quain states, in his recent work *On Diseases of the Rectum*, that he has noticed a case in which, "the disease having been of no long duration, and the suffering comparatively slight, the membrane appeared to be thinned from beneath." The ulcer, once formed, soon increases in size, and usually remains quite superficial for a considerable time; but at length, from the continual irritation, the edges become everted and hard. The surface, however, seldom becomes so indolent as in cases of ordinary fissure; and in this form of the disease the ulceration seldom, if ever, implicates the fibres of the sphincter ani. The pain which, as in fissure, is caused by the evacuation of the bowels is most intense; there is usually very little spasm of the sphincter, but the patient complains of severe lancinating pain, which gradually subsides into a sensation of burning, which continues for three or four hours.

The third form of ulcer is situated in the fossa which exists between the external and internal sphincters; it is by far the most painful and serious affection of the three. It appears to be caused either by the lodgment of a small portion of hardened fæces, or by injury done to the mucous membrane in that situation by the passage of some foreign body, such as a fish-bone. Two cases are known to me where the presence of a polypus of the rectum (the extremity of which was pressed into this fossa every time the bowels were relieved) caused an ulcer in this position.

The ulcer, at first, is seldom more than the eighth of an inch in diameter, and it is generally somewhat deeply excavated. As the disease progresses, the ulceration extends into the substance of the sphincter ani; so that, when the finger is passed into the rectum, the end of it sinks into a small cup-like cavity, the inferior part of which is formed at the expense of the superior margin of the sphincter. Except in cases of long standing, the edges are not indurated, and the surface almost invariably remains florid. In this disease a certain amount of pus and blood is passed at each relief of the bowels. If this ulcer be not cured by means of an operation, it leads to a most troublesome form of stricture of the bowel. The constant irritation set up by the action of the bowels gives rise to inflammation of the submucous cellular tissue; this causes thickening and hardening, by which means the calibre of the outlet is seriously diminished.

The following case will illustrate this kind of termination:—

Case iii. Mrs. S., aged 23, complained of very severe pain before, during, and after the relief of her bowels. She had consulted a surgeon, who, on examination, found an ulcer immediately above the external sphincter. An incision was made through the ulcer into the tissue below; but this did not produce the slightest relief. Six months after the operation, she noticed that the discharge was much increased in amount, and she found more difficulty in passing her motions, which were small and flattened. A year subsequently to the operation, I saw her, and, on examination, discovered an ulcer of considerable size situated on the posterior surface of the rectum, and involving the superior margin of the sphincter, and such extensive thickening of the submucous tissues that the finger could not be passed through. Subsequently, by means of bougies, considerable benefit was obtained.

In these cases, the pain complained of is most severe, and there is more spasm of the sphincter than in simple fissure; in some of these cases the amount of spasm is so great that the muscle increases considerably in size. The pain appears to commence some little time before the bowels are relieved, probably this is caused by the pressure of the loaded bowel upon the ulcer.

Diagnosis. The diagnosis of these cases is by no means difficult. The peculiarity of the pain complained of, the fact of its coming on either during, or soon after, the action of the bowels, and the ease with which these ulcers may be detected by the finger, when it can be introduced into the bowel, render a mistake almost impossible. There exist only two diseases with which these ulcers may be confounded; to wit, a syphilitic ulcer and spasmodic contraction of the sphincter. Neuralgia in the neighbourhood of the sphincter has such well marked symptoms of its own, that it can scarcely be mistaken. With regard to the syphilitic ulcer, its characteristic appearance, the class of persons affected, the existence of syphilitic ulceration about the vagina, remove all doubts as to the nature of the complaint. The diagnosis between spasmodic contraction of the sphincter and fissure is rather more difficult; in fact, it is only by a most careful examination that the surgeon can determine whether an ulcer exists or not. There are, however, a few points of difference which it would be well to remember. In spasmodic contraction of the sphincter, the muscle very rapidly increases in size; the anal orifice becomes so contracted that even a gum catheter cannot be introduced without producing extreme suffering. This amount of spasm is most rare in ulceration, and it is the pressure caused by the finger on the ulcer itself that produces the pain. Again, in ulceration, it matters little in which form, sooner or later there is always discharge of pus and blood; in spasmodic contraction this never occurs. Lastly, the patient having been placed under the influence of chloroform, a careful examination of the bowel can be made (which it is impossible to do without producing insensibility), and, as in the following cases, no ulcer is found to exist.

Case iv. George ———, aged 45, a man of spare habit, sallow complexion, and depressed vital powers, complained of intense pain, which occurred during the time the bowels were acting, and for several hours after. The pain was not continuous, but came on in paroxysms every few minutes. The motions were very small and flattened; there was no discharge or appearance of blood. On examination, the sphincter muscle appeared more developed than usual, and the anus was so contracted that it was impossible to introduce the finger. A speculum ani was employed, and the most careful examination failed to discover any ulcer. Under these circumstances, a small bougie, about six inches long, was introduced every other night. At first the pain caused was very great, and he was unable to retain it for more than three or four minutes; but he was soon able to bear it for a longer time. The size of

the bougie was gradually increased, and he was ultimately cured.

CASE V. A gentleman, aged 35, of spare habit and nervous temperament, had suffered with symptoms like those just described for six months, and the pain had become so severe that he could not take exercise: he had tried various means to obtain relief without success. The most careful examination failed to discover any ulcer, but the sphincter was immensely hypertrophied. Bougies were employed for two weeks without producing the slightest relief, and the patient was so worn out and irritated by the pain he suffered, that he could not be induced to continue the use of them. It was therefore decided to divide the sphincter, and with the exception of the pain produced by the passage of the fæces through the wound, this patient never suffered any inconvenience afterwards.

I should not have insisted so strongly on the existence of this disease, but one of the most recent writers on diseases of the rectum doubts the existence of simple spasmodic constriction of the sphincter.

There is one other precaution necessary in these cases; and that is, to be quite certain that only one ulcer exists. It is not very unfrequent to find two; they may be either one above the other, or situated on opposite sides.

The treatment required for the ulcer in front of the os coccygis, and for fissure, varies according to the stage of the disease. If it be treated before it has become indolent, local applications, and attention to the state of the bowels, are all that is necessary. Grey oxide of mercury and spermaceti ointment (half a drachm to the ounce) or a scruple of calomel to an ounce of lard, with ablutions night and morning and after each relief of the bowels with yellow soap and water, will usually effect a cure. Great care must be taken in the choice of a laxative, the object being not to purge, but to render the fæces soft, so that as little stretching as possible of the ulcer should take place. Confection of senna or milk of sulphur generally produce the desired effect. A very common medicine in these cases is confection of pepper; this, combined with confection of senna, is very useful in cases of hæmorrhoids, but it is apt in all cases of ulceration to produce considerable aggravation of the patient's suffering. When the ulcer has once become indolent, the best and only treatment (likely to prove beneficial) is by the knife. The operation is best performed in the following manner. The patient being placed on the right side, with the knees drawn up to the chin, the forefinger of the left hand is to be introduced into the rectum, and the knife passed up in front of it; the incision is then to be made, commencing a few lines above the superior margin of the ulcer, and to be carried through it down to the external skin, care being taken not to cut into the fibres of the sphincter, except in those cases where the disease has already involved that muscle. After the incision has been made, a small piece of oiled lint may be introduced into the wound. It is better not to allow any action of the bowels to take place for two or three days after the operation; this may be effected by giving small doses of opium or a milk diet.

The treatment required for the ulcer situated above the sphincter is division of the muscle. Local remedies never appear to afford the slightest benefit, but only tend to wear out the patience and spirits of the sufferer. The operation is to be performed in the same way as for fissure; but, instead of merely making an incision into the submucous tissue, the sphincter must be divided by one cut, the wound is then to be dressed in either with oiled lint or silk.

It is of course always prudent to try local means before proceeding to an operation; and the best application is the ointment of grey oxide of mercury, already mentioned. The most satisfactory method of applying the remedy is by means of a suppository tube. The tube should first be lubricated outside, and then filled with the ointment; it is then to be passed into the bowel to the extent of an inch or an inch and a half, and the piston then pushed down; by this means the entire surface of the mucous membrane lining the sphincter is covered by the ointment.

Some surgeons recommend the application of nitrate of silver for these forms of ulceration; but it seldom proves very beneficial, and the pain it causes is quite as severe as that of the division. If it be attempted, a speculum should be introduced into the bowel; by this means, the ulcer is brought into view, its surface should be dried by a piece of sponge or lint, and the caustic freely applied.

56, Maddox Street, Bond Street, May 1860.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

FIBROUS TUMOUR OF THE UTERUS: SPONTANEOUS EXPULSION OF THE TUMOUR DURING THE THIRD AND FOURTH WEEKS AFTER DELIVERY.

By JOSEPH GRIFFITHS SWAYNE, M.D., Physician-Accoucheur to the Bristol General Hospital, and Lecturer on Midwifery at the Bristol Medical School.

[*Read April 26th*, 1860.]

THE case I am about to relate is a good instance of the manner in which the *vis medicatrix naturæ* may sometimes, under favourable circumstances, effect the removal of a tumour which is quite beyond the reach of a surgical operation.

A lady, aged 37, previously in good health, married on August 14th, 1856, and on July 22nd, 1857, miscarried, when about eight weeks pregnant. At that time she was staying in Edinburgh, and was under the care of Dr. Duncan. About six weeks after the miscarriage, she experienced considerable pain in the left iliac region, accompanied with rigors and feverishness; and, on placing her hand upon the part, thought that she could detect a slight swelling. About ten days after this, she was attacked in the night with a great deal of hæmorrhage from the vagina, and afterwards with an increase of pain in the part affected. The pain was more severe at some times than at others, and never entirely left her. About six weeks after the hæmorrhage, she again went to Edinburgh, and consulted Dr. Duncan, who examined her, and detected an enlargement on the left side of the uterus. Soon afterwards she left Edinburgh, and went to Kissingen. She now never entirely lost the pain, and always found it increase at the menstrual periods. At this time she could herself feel the tumour, especially in the morning. She returned to England in July 1858. She was then in tolerable health in other respects, but yet was never entirely without pain, and had a return of hæmorrhage at each menstrual period. In October 1858, she came to Clifton, and soon afterwards consulted Dr. W. Budd, who then examined her, and distinctly felt the uterine tumour. He prescribed medicines for her which had the effect of restraining the hæmorrhage at each period, until, on February 24th, 1859, she menstruated for the last time, and then became pregnant.

She continued pretty well during her pregnancy, with the exception of a good deal of sickness, and occasional pains in the left side, especially in walking. She was not able to distinguish the tumour after the second month of pregnancy. On November 26th, 1859, I was sent for to attend her in her confinement. The first stage of the labour went on favourably, although rather slowly, and occupied altogether about forty-eight hours. The first part of the second stage was tolerably expeditious; but, towards the end of this stage, the progress of the head was much less rapid, although the pains still continued powerful. At last the head became completely arrested at the lower outlet, and remained in that position for four hours. As the pains began to diminish very much in force, I applied the short forceps, and delivered her of a fine male infant. The placenta was expelled without any hæmorrhage. For the first week after delivery, both mother and child went on well. When I called on the eighth day (Sunday, December 3rd), I found my patient feverish, and complaining of headache, which she attributed to taking rather too much animal food on the previous day. I prescribed an aperient and a less stimulating diet, and called to see her on the following Tuesday. She was still rather feverish; the pulse was 104; and she complained of dull aching pain, with slight tenderness on the left side of the abdomen, just above the ilium. I ordered her eight grains of Dover's powder, and three grains of hydrargyrum cum cretâ, to be taken at bedtime; together with poppyhead fomentations to the abdomen. On the following Thursday, the symptoms were much the same; and she was directed to repeat the powder, and apply bran poultices. As the pain and tenderness still continued, I agreed to meet Dr. Budd in consultation on Tuesday, December 12th.

We found her in much the same condition as regards the general symptoms. On examining the abdomen, we felt that the fundus uteri reached nearly as high as the umbilicus; and the uterus itself was as large and hard as an uterus just after delivery, before the expulsion of the placenta. The enlargement was more perceptible on the left side of the uterus, which was also somewhat tender on pressure. We were both of opinion that some unfavourable change, such as subacute in-