

morrhage was stopped, and perhaps a valuable life preserved, by the uterus contracting upon the placenta and holding it as a plug.

In the latter case the os uteri closed upon the cord before the placenta was separated from the surface of the uterus, and no hæmorrhage occurred.

These were cases of irregular action of the uterus after the birth of the child. Were they what are called hour-glass contractions? If so, the term is badly applied; for the stricture was caused by the os uteri, and not by the central fibres of the uterus forming it into the shape of an hour-glass. I should be inclined to doubt the existence of hour-glass contraction, were it not for the weighty authority of some who have described it; and should rather imagine the first cavity of the hour-glass to be the vagina, lengthened and enlarged by distension; the central narrow portion the contracted os uteri; and the upper cavity the uterus.

In natural labour, it has often struck me that more power has been attributed to the uterus in the act of child-birth, than accords strictly with the real nature of the process; for although the uterus is undoubtedly the principal agent, it is not so much by its own force of contraction, as by its power of exciting and regulating the action of the assistant muscles, particularly in the latter stages of labour, that the expulsion of the fœtus is accomplished. During a pain, the uterus contracts and presses the child downwards against the soft parts in the pelvis; this creates a desire for the expulsion of the offending body; and all the muscles which can assist in producing that effect are brought into action: when the uterus ceases to act, the others are quiet also. This mechanism obtains, even after the child has escaped from the cavity of the uterus. In presentations, where the body and limbs are born before the head, the latter, being quite out of the cavity of the uterus, may perhaps rest against the perineum for some time, and during several pains; still the pains intermit and are dependent on the action of the uterus, although the expulsion of the head is effected by the assistant muscles. The uterus gives the command, and they obey; the uterus, by its contraction, is the exciting cause, and the other muscles, acting as it were by sympathy, are the immediate cause of the expulsion of the head. In further illustration of this, I may mention the following case:—A woman had been in strong labour more than thirty-six hours. Pelvis small; face presentation, and head firmly impacted high up in the pelvis. After very great difficulty, delivery was effected by means of the vectis. Hæmorrhage followed; the patient was faint and exhausted; the uterus had not power to contract. I introduced my hand, and found the uterus dilated and flabby, the placenta adherent in chief of its extent; but as the hæmorrhage continued, I gently separated the placenta, by passing my hand edgewise between it and the uterus, placed the back of my hand against the uterine vessels, and drew the placenta into the vagina with my other hand by means of the funis. The uterus feebly and slowly contracted, the hæmorrhage ceased; but before the contraction was sufficiently strong and perfect to make it safe for me to withdraw my hand, the placenta, during a pain, was expelled from the vagina by the side of my arm. I had here an opportunity of feeling

the slight contraction of the uterus, and the consecutive effort of the assistant muscles, powerful enough to force out the placenta by the side of my arm. The patient experienced a speedy recovery, in spite of the dangers she had encountered.

September, 20, 1841.

## CASES OF ARTIFICIAL ANUS, TERMINATING SPEEDILY IN RECOVERY.

By GEORGE MALLETT, Esq.

SURGEON, BOLTON.

THE following cases of artificial, or, perhaps I should rather call them, factitious anus, one of them the result of imperfectly reduced hernia, and the other the consequence of a severe accident,—are, I think, worthy of being placed on record, as indicating to what a great extent the natural powers are capable of restoring injured parts to their normal condition.

CASE I.—R. T., aged thirty years, a servant man, when attempting to get upon a coach going at its usual speed, was thrown upon his back, between the fore and hind wheels, the latter of which grazing the scrotum, passed over the pubis near its junction with the ramus of the right ischium. I saw him about an hour after the accident; his countenance was pale and sunken, pulse feeble and slow; the scrotum was swelled and much blackened. On the right side, about two inches from the symphysis pubis, there was a circular swelling about two inches in diameter, which appeared to be caused by extravasated blood; the swelling in the scrotum evidently arose from the same cause. The skin was slightly grazed along the tract of the wheel, but there was no wound. The man was able to move his thigh in any direction, but the act of moving it caused much pain, and it was unable to sustain the whole weight of the body. He was ordered to bed, and an evaporating lotion constantly applied. Four hours afterwards, the swelling and pain increasing, the pulse also being stronger, twelve leeches were applied, and some aperient medicine given. In a short time he passed some urine, and his bowels were evacuated three times, but the dejections consisted only of liquid blood. On the following morning, May 4th, the pulse was 96, and still rather feeble; skin moist, and the injured parts presenting much the same appearance as on the previous evening. Half an ounce of castor oil was given, which, during the day, produced several natural but relaxed motions. In the evening the swelling much increased, extending nearly as high as the umbilicus, and now, upon being handled, it crackled as if air had been effused into the cellular tissue. The pulse had increased both in frequency and fulness, being 110, and there was a considerable degree of abdominal tenderness; twelve ounces of blood were taken, with great relief.

5. The swelling had extended as high as the epigastric region, and the scrotum was enormously distended, and contained air. The tongue was white and dry; pulse 110, and full; ten ounces of blood were again abstracted, when slight faintness came on. During the course of the day he suffered severe and intermitting abdominal pain,

which was relieved by opiates, the bowels having been previously moved by an injection. In the evening, there was a good deal of hiccup, and he made frequent ineffectual efforts to vomit.

6. No material alteration in the symptoms; the same treatment was continued.

7. Much the same, as far as the constitutional symptoms were concerned, but the swelling had gradually increased; the cellular tissue, when pressed upon as high as the neck, emitted a crackling sound. A free incision was made into the scrotum, from which came a large quantity of coagulated blood and fetid gas. The attempts to vomit and the hiccup now ceased, but he had several involuntary motions. The pulse for the last two days had varied in frequency from 100 to 110, being soft and easily compressible. The tongue was foul but moist, and the expression of the countenance very bad, the features being sharp and sallow.

8. No alteration, except in the state of the pulse, that being more frequent and very feeble. Some porter and a more generous diet were ordered.

9. The scrotum was again distended, and a considerable swelling had arisen in the upper and anterior part of the thigh, which, from its pulpy feel, I believed to contain *faeces* as well as gas. A very large incision was then made into the thigh, and another into the scrotum, from both of which issued a considerable quantity of *faeces* as well as gas. He was ordered quinine, wine, porter, and as nutritious a diet as his stomach would bear.

12. The swellings much decreased; no pain, but a great feeling of debility and sinking. Since the late incisions were made, there had been no evacuation from the rectum, but an immense quantity of faecal matter had been discharged from the wounds.

14. Considerable reaction; pulse 100, and very full; short dry cough, breathing hurried, and complaining of pain under the sternum. Small but frequently-repeated doses of antimon. tartar., a blister over the sternum, and low diet, were prescribed.

15. Chest relieved; expectoration free.

16. Generally improving; tongue clean; pulse 90, and compressible. The appetite has improved, and for the first time the patient expressed a wish for solid food.

20. Still further improving; appetite remains good, and the strength is much increased. The *faeces* still come through the wounds, and none from the rectum.

21. Complaints of pain in passing urine, and upon examination a swelling was observed in the perineum, which was supposed to contain *faeces*. An incision was made into it, which was instantly followed by *faeculent* matter. A probe was passed from the wound in the thigh, which came out at the perineum, proving the communication between the two wounds.

23. The *faeculent* discharge was much diminished. An ounce of castor-oil was given, and an injection administered, which in the course of the night produced two copious evacuations per naturales vias.

26. No discharge from the wounds, except pus and wind; motions natural. From this time he gradually improved, and on the first of July the wounds were almost healed, and with the assistance of a stick he was able to walk nearly a mile.

Aug. 1. He was pronounced well, there remaining only a slight weakness on the right side, and which was daily decreasing.

On the day after the accident, when air was felt effused amongst the cellular tissue of the abdominal parietes, it was evident that there must have been a rupture of some substance, and from the pain felt in moving the thigh, and the inability to bear the weight of the body upon it, I thought it probable that there might be a fracture of the pubis, and that a splinter of bone might have penetrated the *cæcum*; but as no portion of bone came away, or was in any way perceived during the treatment, I now think it more probable that the pressure of the coach-wheel, acting upon a distended gut, had been sufficient to rupture the bowels. Upon minutely examining the part after the healing of the wounds and the disappearance of all swelling, a depression of the ramus of the pubis, near its junction with the ischium, was distinctly felt, and taking all the circumstances of the case into consideration, there can be no doubt that the intestinal injury was produced either by the direct action of the wheel and the abdominal muscles, or by the pressure of the depressed bone upon the *cæcum*. I have now lost sight of the patient, but three years after the accident I saw him, and he made no complaint, but that he had rather more difficulty in keeping his bowels regularly moved than he had previously to the accident. The weakness of the right side had entirely disappeared.

CASE II.—On the 19th July I was requested to visit the wife of a labouring man, who complained of severe pain and swelling in the left inguinal region. She stated that a small tumor had existed there for years, but which had a fortnight since suddenly increased in size, in consequence of the exertion of raising a canful of water to her head; a few hours after which, vomiting came on, and a medical man was called in, who reduced the hernia. The vomiting then ceased, and violent diarrhoea followed, which continued up to the time I saw her.

Upon making an examination, I found a tumor, about the size of a pigeon's egg, so exceedingly painful that the slightest touch could not be endured. She could not say whether the tumor had entirely disappeared when the first medical man gave up his attendance, but she thinks it was much as it had been before its sudden increase. The surrounding enlargement was much thickened and inflamed; the abdomen in every other part free from pain, notwithstanding severe pressure was applied. Pulse 96; no vomiting; and she had at least six or eight motions in the twenty-four hours. My view of the case was, that the original tumor consisted of omentum, and that in consequence of her exertion a portion of intestine had been forced into the sac, which caused the vomiting; the intestinal hernia being reduced, the vomiting ceased, and that afterwards the omentum had inflamed, and was then, in all probability, in a gangrenous state. I did not think it proper that any attempt should be made to return it into the abdomen, and there being no violent constitutional symptoms present to justify an operation, I determined for the present to leave the case to nature, merely directing the observance of perfect quietude, and the application of a poultice.

July 20. The swelling and external inflamma-

tion were much increased, and the livid hue of the integument indicated the existence of gangrene. The bowels had been moved four or five times; there was still no tenderness upon the other portions of the abdomen when pressure was applied; pulse 100. As she had not slept for several nights, and suffered much local pain, and seeing nothing to counter-indicate its use, I gave her at bed-time two grains of opium, and ordered it to be followed up in the morning, if necessary, by small doses of the sulph. of magnesia in infusion of roses.

21. At eight o'clock in the morning the tumor burst, and, to my great surprise, I found that a large quantity of fæculent matter had issued from the opening. I confess that I had not any idea that the case could have been intestinal hernia, and the following circumstances would, I think, have excused any one coming to the same conclusion, viz. diarrhœa and no vomiting. No general abdominal tenderness, and very little constitutional disturbance.

The pulse was now small, and about 100. Tongue, white, but not dry. The part was directed to be kept as clean as possible by frequent fomentations.

22. The fæces issued freely from the groin, and she had had also three or four motions per anum. Upon the whole, she did not appear so well as yesterday. She had a short dry cough, but no pain in the chest; pulse 120, with much restlessness and irritability. A pectoral mixture was prescribed to allay the cough, and an anodyne draught given at bed-time.

23. Much better; the draught had procured several hours of refreshing sleep; the restlessness and cough were both abated.

24. Much the same.

25. Not quite so well; cough worse; pulse 100, and intermitting. No pain in the chest, or difficulty of breathing. The cough mixture was ordered to be taken freely. She continues to have two or three motions daily per anum, and the discharge from the groin is gradually decreasing.

26. Improving; pulse 86, and steady.

27. Much the same, but complaining of want of sleep; an anodyne draught was given, which produced refreshing sleep.

August 6.—Very much improved; healthy granulations appearing in the wound, which was in size much diminished; but for many months a slight discharge occasionally took place, having a fetid odour. It was nearly twelve months before it entirely ceased. The last time I saw the patient she was quite well.

The true pathology of this case I believe to have been, that from the first the tumor was caused by intestinal protrusion, and that the anterior portion of the gut had formed adhesions to the sac, thus preventing its entire return into the abdomen, while the posterior portion, being within the abdomen, left a space sufficiently large and free for the passage of the fæces. The exertion of raising the can of water to the head caused, in all probability, the protrusion of the whole calibre of the intestine, and hence the vomiting. The hernia being partially reduced, the vomiting ceased; the unreduced portion then became inflamed, and sloughing was the result.

I am not aware that any practical deductions can be drawn from these cases, except that, under very severe and discouraging circumstances, we

need not despair of effecting a cure, and also that we must not too readily conclude, that because the bowels are capable of evacuating their contents in cases of hernia, therefore the protrusion cannot be intestinal.

September 28, 1841.

## TREATMENT OF DYSMENORRHOEA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

GENTLEMEN,—I read in your journal of last week some observations by Mr. Toogood on the painful and distressing affection, dysmenorrhœa, to which females living in a state of celibacy, and those who, when married, do not become parents, are more especially the subjects. Taking a physiological view of this affection, I believe it to be dependent most generally on a subacute inflammatory state of the uterus, more particularly of the internal lining membrane, and being a muscular organ, spasm is, as in most muscular organs so affected, a most distressing symptom: if the menses be copious, whereby the vessels are relieved of their congested and turgid condition, relief will ensue the more quickly. Attention to the bowels and secretions, with the use of saline purgatives, as sulphate of magnesia in solution with tinc. hyoscy. will often be found to be advantageous, for by these means we produce copious watery secretions, and unload the hæmorrhoidal and uterine vessels; anodyne fomentations should be used at the same time, and if the pain be severe, ten grains of Dover's powder, with two or three grains of calomel, will generally give prompt relief, if given prior to the saline aperient. Cupping and warm-baths are all beneficial in a degree.

Antispasmodics, especially if combined with opium, will afford temporary relief; but I believe, of all temporary remedies, a suppository of opium, introduced either in a liquid or solid form into the rectum or vagina, will be the most effectual in giving quick relief. A state of nausea kept up by antimony, I think, relieves, but is so unpleasant a remedy as to be seldom available.

In my own practice, I have made use of a combination of anodynes, as the following:—

Camphor, two scruples; extract of hyosciamus, and extract of poppy, of each one scruple; tartar emetic, one to three grains. Divide into twenty pills; two or three every second or fourth hour.

In obstinate chronic states, a judicious administration of mercury, so as gently to bring the system under its influence, is to be adopted. Blue pill or Plummer's pill may be added to the above formula. In many subjects, especially the robust and plethoric, a moderate abstraction of blood from the arm is to be recommended. Veratrine ointment, introduced by Dr. Bushnan, is not to be relied on in all cases, any more than belladonna applied under similar circumstances. I think we should take more general views of disease, and not expect the same remedies to avail alike in all cases of the same disease. The great varieties of constitution indicate a varied treatment. In the inflammatory habit, this disease will require a more antiphlogistic treatment. In the nervous temperament, anodynes will give the most efficient re-