

astringent and antiseptic solutions, not less than a pint or a pint and a half at each injection. This treatment is much recommended by the Italian school, but it is obviously only applicable in the earlier stages. A properly regulated diet is exceedingly important, the indications being to give a bland, nutritious, non-irritating food, easily absorbed and grateful to the patient, who has to fight it out but poorly aided by drugs. But when curdy, fermenting masses appear in the motions the diet must be varied, and we used with great advantage fresh and rather weak beef-tea, fresh veal broth, and calves' feet jelly; and, when all these were refused, raw meat, prepared by finely scraping good fresh mutton, mixed with quince jelly, was well taken and well digested. In convalescence prepared food twice a day and underdone mutton or beef are the best, with small quantities of the best old port wine you can get. Rice water, linseed water, weak tea, and slightly acid drinks may be given to relieve thirst.

From the foregoing description it will be seen that this disease differs very considerably in its clinical symptoms from dysentery and ordinary colitis and so-called "mucous disease." In the first place, the large masses of mucus are peculiar—they are "blood-dyed," if I may use the expression, just like lumps of dark wine-jelly, and at first contain no liquid blood or even small clots; they are voided easily, without straining; there is no pain, either preceding evacuation or after, and fairly good motions at first follow these masses. Later, the motions become slimy and blood-stained, or accompanied by small clots of a bright-red colour, which may be seen on the top of the motion if the child has used the chamber. In the later stages and in the worst cases sloughy masses and black, gangrenous shreds, smelling horribly, may be passed. From the increasing size of the masses of mucus in the above case, their compactness and their shape, we could easily deduce that the ulceration was more or less circular in shape, that it advanced by the circumference, that the older portions first sloughed and then became gangrenous, and that at one time the ulcerated patch must have measured at least six or seven inches in circumference. The pathological sequence of events was apparently as follows: (a) catarrhal inflammation of the mucous coat just above the sigmoid flexure of the colon; (b) increasing hyperæmia and venous vascularity giving rise to wine-coloured mucous discharges; (c) breaking down of the surface of the mucous membrane with formation of sloughs, and a process of auto-infection due to development of toxic inflammatory products; (d) gangrene and extension of ulceration along the edges; (e) constitutional disturbance due to absorption of morbid products; (f) limitation of infective process and further ulceration by the formation of a protection zone in the lymphatic system just below the muscular coat; and (g) healing of ulcer from the circumference to the centre. The perusal of the clinical history of the case will clearly prove this series of pathological changes; in fact, as Dr. Gutierrez put it to me, the diagnosis, course, and even treatment of these cases can be made out by mere inspection of the napkins and dejecta alone. What connexion there was between the laryngeal catarrh of the preceding two days and the intestinal attack I am not prepared to state. In another of my cases a similar sequence took place; but Dr. Gutierrez assures me he has not observed the complication, if complication it really be. Another very interesting point in this case was the comparative ease with which nutrition was kept up, differing in this respect so widely from dysentery, the explanation being that the ulcer, large as it was, was situated at the extreme end of the alimentary tract; secondly, that blood infection and constitutional disturbance were comparatively slight in proportion to the large local lesion; and, thirdly, the child was kept as much as possible to his usual regime, being encouraged to take his food and to sleep at his accustomed hours. Ultimate and complete recovery is usually retarded for two or even three years, nutrition being but slowly carried on. In my case, in spite of considerable emaciation and wasting of legs, buttocks, and upper extremities, recovery was complete within the year, and due, I think, to very efficient nursing and a very great care in the preparation of the food during the acute stage. Another important point is that, according to Dr. Gutierrez, cicatricial contraction of the lumen of the bowel never follows, and in my case—one of the worst he had ever seen—the child is now (eighteen months after illness) having motions of proper shape and size. In all these points the natural history of the disease differs

widely from dysentery, with which the earlier symptoms may be confounded, and as a remarkable instance of extensive local intestinal ulceration with recovery I have ventured to put the case on record *in extenso*.

Buenos Ayres.

TWO CASES OF FÆCAL FISTULA TREATED BY RESECTION OF BOWEL.

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IN THE LANCET of Jan. 13th, 1894, I recorded two cases of resection of small intestine, gangrenous in hernia, one of which was primary and fatal, the other secondary and successful. The notes of two more recent cases of secondary resection—one of large bowel which had been ruptured by injury and was followed by fæcal fistula, and the other of small gut which had in all probability been gangrenous in a femoral hernia, and was likewise followed by fistula—both of them successfully undertaken, may be thought to be of some interest and worthy of publication.

CASE 1.—A man aged twenty-seven years was admitted to St. Mary's Hospital on Oct. 21st, 1893, having been run over a few minutes before by the trap which he had been driving and from which he had been thrown. He believed that a wheel had passed over the lower part of his back, and here there was a decided linear bruise. He complained of pain below and to the outer side of the left anterior superior iliac spine, and at this place there were slight redness and swelling. There was no marked collapse, nor did he seem very ill, but it was thought right to keep him in the hospital and in bed. There were, so far, no evidences of internal injury, but the man was restless and uncomfortable; and on the 28th—that is, a week after his accident—his evening temperature rose for the first time to 100° F. Coincidentally with the fever he made greater complaint of pain in the left loin and ilio-inguinal region, and this steadily increased day by day. His temperature, moreover, rose to 101°. Presently there was a suspicion of fulness and increased resistance in the left flank, the part became tender, and on Nov. 11th—the temperature on the previous evening having been 102°—there was distinct fluctuation between the left great trochanter and the crest of the ilium. From this spot fæcal pus was evacuated by incision, and soon afterwards solid fæces came from the opening. Two days later it became necessary to make a second incision immediately internal to the anterior iliac spine, and from this also there was a copious fæcal discharge. The first wound below the iliac crest closed soon after the more internal and direct route had been established for the discharge. The character of the fæces pointed clearly to their escape from the large bowel, but it was impossible to say with certainty whether the perforation had been the immediate result of the injury or had followed the sloughing of a severe contusion. The history of the case rather inclined us to regard the second cause as the more probable. At any rate, the fæcal escape was altogether extra-peritoneal, and we determined to see what rest, drainage, and cleanliness might do towards closure of the fistula before hurriedly resorting to operation. Although from time to time it looked as if the hole were going to close, the hopes of it were blasted by renewed discharge, and on Jan. 20th, 1894, three months having passed since the accident, and the discharge of fæces being as great as ever, it was resolved to expose the gut, and, if the orifice were a small one, to endeavour to close it by infolding of the wall with lateral sutures. Free incisions were required in order to find the bowel. It was firmly bound by adhesions, but by carefully following the route of the fistula that part of the bowel which was perforated was found without disturbing the whole circumference of it. In this way the general peritoneal cavity was avoided. A longitudinal rent with jagged edges, three-quarters of an inch in length, was found at the lowermost end of the descending colon and, as far as could be judged in the confusion of adhesions, at that side of it which is commonly uncovered by the peritoneum. A sufficient length of bowel having been freed to make the manipulations easy, lateral Lembert sutures were inserted so as to infold the wall of the gut and hide the rent, in the hope that peritoneal adhesions might be formed

of sufficient strength to close the opening. The depths of the wound were packed with iodoform gauze. The man, who had been extremely nervous beforehand and had with difficulty consented to the operation at all, bore it badly and was very sick after it. The next day his abdomen was a good deal distended, and the distension had increased so much by the third day that I felt sure no sutures could possibly hold, and when the wound was dressed on the 23rd we were not surprised to find that there had been much escape of fæces. The explanation of this great accumulation of flatus lay in the fact that he had been continually gulping and swallowing air, a habit of which it was obviously imperative to cure him before undertaking any further operation. In the meantime, however, he was wishful that another chance should be given to spontaneous closure, and it was therefore not until March 10th that, the fistula being as bad as ever, resort was had to resection of the damaged piece of bowel. On this occasion it was necessary to open the peritoneum by a vertical incision three inches in length external to the linea semilunaris, and, having joined this by a second at right angles which included the fistulous track, the piece of damaged gut was found adherent to the pelvic and neighbouring abdominal wall. By careful dissection it was ultimately separated, and a couple of inches were then removed. The ends were united by the Czerny-Lembert suture. The abdominal wound was closed by tiers of sutures, save in that part where the external opening of the former fistula was, and here the depths were plugged with iodoform gauze. The after-history was uneventful, but on the 12th and two following days the dressings were fæcal in odour, and there was certainly escape of flatus if not of solid fæces. The opening, however, must have been very small, for by the 21st there was no longer any suspicion even that the ends of the gut were not soundly united; and on the 25th the patient had his first natural action of the bowels. Thereafter all went well, the abdominal wound healed in due course, and he was discharged on May 4th. When seen a few months afterwards he was in all respects perfectly well.

Although more than six months were spent over the treatment of this case it is questionable whether a better result would have been attained had resort been had to resection at a much earlier time. Apart altogether from the man's aversion from operation, it would in all probability have been a more dangerous thing to have opened the abdomen when the surrounding parts were in a state of acute inflammation from the spread of fæcal contamination, and it was doubtless better to wait until the route for the fæcal discharge had settled down into the comparative quietude of a distinct sinus. The ultimate result in this respect justified the delay. How far the failure of the earlier operation in January was due to faulty methods or to the impossibility of closing the rent—or, indeed, any rent—by the method adopted it is impossible to say, but I had no doubt at the time that the enormous distension of the gut with air had much to do with the yielding of the sutures and the early escape of fæces.

CASE 2.—A woman aged forty-two years was admitted on Nov. 15th, 1893, with a fæcal fistula at the upper part of the right thigh. The position of the opening was immediately below Poupart's ligament, external to the pubic spine, and suggested perforation of gut from gangrenous hernia. This diagnosis was supported by her history, for she said she had had a violent attack of pain a year before at this site, with the development of a lump which gradually increased in size. After the lapse of six months she became much worse, was laid up at home with inflammation, and then the lump burst. There had been discharge of fæces ever since, now from one point and now from another, fresh abscesses having formed and burst from time to time. One fistula alone was present on her admission, but there were the scars of former orifices. She suffered a good deal of pain. The patient absolutely declined to submit to operation, and attempts were made to close the sinus by injections of nitrate of silver. They had no influence, and, still declining operation, she left the hospital on Dec. 7th. She returned on March 31st, 1894, converted by the inconvenience and suffering to the necessity of operation, and this was accordingly undertaken on April 11th. A vertical incision, which had to be extended through Poupart's ligament, was made over the site of the fistula, and it was soon found that a small area of the circumference of a piece of ileum, with an orifice in the centre, was adherent to the tissues of and adjoining the upper end of the crural canal. Part only of the lumen of the gut was

thus adherent, and everything pointed to gangrene of a hernia of Richter's variety. There was no difficulty in isolating the implicated portion of the bowel, and, three inches having been removed by slightly diagonal section, the ends were joined by the Czerny-Lembert method of suture. The whole of the abdominal wound and the major part of that in the thigh were closed by sutures, but the exact site of the fistula was plugged with gauze. The woman bore the operation extremely well, the wound healed forthwith, and she had her first natural action of the bowels on the 20th. Her general health rapidly improved afterwards, and when seen in April of the present year she was well and having a daily natural action without pain or difficulty.

This case was a good example of one of the results of gangrene from the neglect of a hernia which has not been recognised and submitted to treatment. In all probability the general symptoms were never very grave, and had the woman come under observation at the time the case would have been especially suitable for primary resection, and the use of some artificial method for the rapid approximation of the divided ends of the bowel. Of the various instruments for this purpose there can be no question, I think, that Murphy's button has in the main been followed by the best results, and is the one most free from danger. My thanks are due to my dressers, Mr. Tenison, Mr. Herrington, and Mr. Austin, for their careful notes and the interest they took in the treatment of these two patients.

CASES ILLUSTRATING THE SURGERY OF THE KIDNEY.

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(Continued from p. 865.)

THE present communication brings my cases of abdominal nephrectomy up to date, and I am sorry to say that two of the cases were fatal, though one of them was so on account of an unfortunate complication not properly to be referred to the operation itself.

CASE 47.—A young woman aged thirty-two years was first seen in the spring of 1894 on her return from wintering abroad for her health which had long been unsatisfactory. She had for many years suffered very frequently with most severe spasmodic asthma, and her menstruation had never been properly established, there being only an occasional slight pale discharge hardly to be considered. When I first saw her emaciation was extreme; I hardly ever saw anyone so thin, and yet she was bright and full of "go," and would join in the social pleasures of her position. On examining the abdomen, in which she said she had a painful swelling, I found a large, tender, and very mobile kidney, and at this visit I thought it might be merely a floating kidney distended with urine. Subsequent examinations, and the use of the thermometer, soon convinced me that the condition was much more serious, and that she was suffering from advanced tubercle of the kidney, and I asked Sir William Broadbent to see her with me. He had already seen her some years before, and had then found the urine normal. He agreed with me as to diagnosis, but thought there was no immediate urgency, and that the nephrectomy which I had suggested might be deferred and the patient watched for a time. Soon after our consultation she became so much worse that I was obliged to confine her to bed. The pain became very severe; the evening temperatures ran high—from 102° to 104° F.; sweating was profuse; and the kidney became fixed, so that I feared some perirenal infection had occurred. The patient herself was very averse to operation, and much valuable time was lost before I could obtain her consent, her general condition through these weeks becoming daily more serious and more unfavourable for a severe operation, while the local condition led me more and more to fear perirenal complications, such as I have described in previous cases as most seriously affecting the immediate results of operation. In July Dr. Douglas Powell kindly saw her with me, pronounced the lungs to be sound, and joined me in urging the necessity for operation; at last she consented, and I operated on July 24th. The kidney was a