CASE
OF
INTESTINAL OBSTRUCTION
FROM
STRICTURE OF THE SIGMOID FLEXURE
OF THE COLON,
TREATED BY THE FORMATION OF
A LUMBAR ARTIFICIAL ANUS.

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[Report by Mr. Gibbes.]

TO THE EDITORS OF THE PROVINCIAL MEDICAL AND
SURGICAL JOURNAL.

GENTLEMEN,—I shall feel much obliged by the publication in your Journal of the following case of intestinal obstruction, in which an artificial aperture was made in the descending colon, without opening the peritoneum.

As, I believe, this operation has not been before practised in England, and only by one surgeon in France, I beg leave to preface the report of the case by a few observations.

Several attempts have been made to relieve congenital or acquired obstructions of the lower part of the intestinal canal by the establishment of an artificial anus; and different situations have been selected for the preternatural opening—namely, the perineal, the iliac, and the lumbar regions. The perineal operation is only applicable to cases of congenital obstruction. Acquired obstructions require the opening to be in the anterior or lateral part of the abdomen; and the operation in this situation is applicable also to congenital obstructions, and may be performed in such cases as are considered irremediable by an artificial opening in the perineum.

In 1720, M. Littre originally proposed the formation of artificial anus in the iliac region. According to his plan the abdominal walls and the *peritoneum* were divided, and the distended intestine was to be drawn out at the wound, and opened. He further proposed to retain the intestine in the vicinity of the wound by a ligature passed through the mesentery, which should be allowed to remain a few days, until the bowel had become united by adhesion to the external wound.

M. Pillore, in 1776, modified the iliac operation of Littre, by uniting the wound of the intestine to the parietal wound by several points of suture.

The operations of Littre and Pillore have been performed in numerous instances. In the article *Fistula Intestinal* of the "Cyclopædia of Practical Surgery," I have arranged in tabular order twenty-four such cases, from which it will appear that, in several instances, the operation has been successfully performed, but at the same time it is evident that the mortality was considerable; and in most instances, where the cause of death is stated in the reports, peritoneal inflammation led to the fatal result.

To obviate the danger incurred by opening the peritoneum, M. Callisen, of Copenhagen, proposed to open the colon in the lumbar region, where it is only partially covered by peritoneum, and he maintained that the intestine might be reached in this situation without opening the cavity of the abdomen. To accomplish this object, he proposed to make a vertical incision, extending from the edge of the false ribs parallel to the anterior border of the quadratus lumborum muscle. He thus hoped to reach the colon between the layers of its short and imperfect mesentery. The principal objection advanced against the operation of Callisen was, that in most instances it would be found impracticable, as the colon in the lumbar region was generally attached by a mesentery of considerable extent.

It was, moreover, urged that Callisen himself found great difficulty in executing the operation on the dead body, and that in many instances he failed, the peritoneum having been unavoidably opened. Most surgeons, amongst whom was Dupuytren, agreed in condemning Callisen's proposal, and gave the preference to the iliac operation of Littre or Pillore, until within the last three or four years, when the operation of Callisen has been revived and modified by M. Amussat. This accomplished surgeon has shown that the failure of the operation on the dead subject was owing to the intestine being empty, and that in such cases as require the formation of an artificial anus the colon is greatly distended; in which condition the layers of peritoneum, forming its imperfect mesentery, are so far separated as to allow of the intestine being reached without opening the peritoneum. He has farther introduced an important modification of the operation of Callisen by adopting the transverse instead of the vertical incision of the integuments and muscles.

M. Amussat has performed the operation five times. Four of the cases were perfectly successful. The subject of the fifth case died on the tenth day from the progress of the carcinomatous disease, but had experienced great relief from the artificial opening.*

The case which I now submit to the profession affords another instance of the easy practicability of the operation, and of the relief which it is capable of affording. Had it been performed a few days earlier, before the cæcum had been irrecoverably injured by extreme distension, it is not improbable that the result would have been fortunate.

I am,

Gentlemen,

Your most obedient servant,

T. P. TEALE.

Leeds, March 10, 1842.

Mrs. Wager, of Holbeck, aged 54, was admitted into the Leeds Infirmary on March 1, 1842, under the care of Mr. Teale, suffering from obstruction of the bowels.

She had been subject to constipation from her youth; and during the last five years her motions, when solid, have been of small size and figured appearance. On the 14th of February she was exposed to the rain on a cold day, and afterwards suffered severely from pain and swelling of the abdomen. On the following day she took some tincture of rhubarb and opium, and afterwards a dose of castor oil. This produced no evacuations by stool, but caused copious and long-continued vomiting. On the 16th she parted with one small stool, mixed with half a pint of fluid blood, and for several days she voided small quantities of blood and mucus, occasionally containing a little fecal matter. On the 18th, complete obstruction occurred, and the abdomen became tumid. Under the direction of Mr. Dobson, surgeon, powerful aperients and copious enemata were repeatedly employed for several days, but without producing any evacuation by the natural passage. Medicines and food were almost instantaneously rejected. On the 23rd the vomiting ceased, but the bowels remained obstinately constipated.

On the morning of the 1st of March the patient was visited by Mr. Teale, in consultation with Mr. Dobson, when it was ascertained that the upper part of the rectum was of unnaturally small calibre. A small ivory ball, attached to a silver stem, was arrested about six inches and a half above the anus. A gum-elastic tube was introduced as high as this point, and an attempt was made, by means of a powerful syringe, to inject a quantity of tepid water above the contracted part, care being taken to prevent its immediate escape by the anus. After the syringe had been em-

* Two of these cases are related at considerable length in the article *Fistula Intestinal* already referred to.

ployed for a considerable time, with as high a degree of pressure as was deemed prudent, it was found that the fluid only entered the lower part of the bowel, which, however, could only hold eight or ten ounces. The evidence of mechanical obstruction being decisive, and the prospect of success from further perseverance in medical or mechanical means for its relief being very slight, with the permission of Mr. Dobson, Mr. Teale proposed to remove the patient to the infirmary, considering that the case was one which might be relieved by the formation of an artificial anus in the lumbar region.

At five, p.m., Mr. Teale was joined in consultation by his colleagues, Mr. Smith and Mr. W. Hay, several other surgeons and pupils being also present.

The patient's countenance now appeared extremely sunken; her lips and cheeks presented a slightly purple tint; she was much emaciated; pulse 100, and somewhat hard; skin of natural temperature. She complained of great uneasiness and distress from the distended state of the abdomen, which, however, was not tender on pressure. The abdomen, although greatly enlarged, did not exhibit the irregular surface which it presents when the tumidity is produced solely by distended coils of small intestine, but the tumefaction was more general and uniform, being, however, most strongly marked in a transverse direction from one lumbar region, across the umbilical, to the other lumbar region, the epigastrium being not remarkably prominent. The left lumbar region was decidedly more prominent than the right, not only when viewed anteriorly, but also posteriorly. The whole abdomen was highly tympanitic, no part sounding dull on percussion. Both lumbar regions, when examined posteriorly, were prominent, elastic, and tympanitic, but these characters were most evident on the left side. On examining the rectum, the anus was found excoriated and inflamed by the frequent administration of injections. The lower part of the rectum was capacious, but the finger could be made to enter, by disentangling its folds, a portion of intestine more contracted than natural. A small ivory ball was arrested at the height of six or seven inches. One of Dr. O'Beirne's tubes was introduced, but was arrested about the same point. A gum-elastic catheter returned bent upon itself, when an attempt was made to push it through the contracted part. The upper part of the pelvis was filled with the general tympanitic tumour which occupied the abdomen.

After this investigation it was decided in consultation to make an artificial opening into the intestine, as no reasonable hope could be entertained that a further perseverance in medical or mechanical treatment would be able to overcome the obstruction, and as the sunken countenance, great suffering, and rapid emaciation of the patient forbade further delay. The operations of Litre and Pillore were considered inadvisable, as they necessarily required the incision of the peritoneum. It was therefore determined to make an opening in the colon, after the manner of Callisen, modified by M. Amussat.

It next became important to decide whether the opening ought to be made in the left or in the right lumbar region. From the examination which had been instituted, it was evident that the upper part of the rectum was preternaturally contracted, and it was not improbable that the diminution of calibre might extend considerably higher; but that the descending colon was not implicated in the contraction was inferred from the prominent, elastic, and highly tympanitic state of the left lumbar region, especially at its posterior aspect. It was moreover urged that the general form of the tumefied abdomen was such as would be produced by an enormously distended colon, and not such as is observed when the enlargement is caused by the distended coils of the ilium, whilst the colon is collapsed. From these considerations the left lumbar region was selected as the seat of operation.

The patient being placed upon a table, on the right side, with the face and abdomen inclining downwards, Mr. Teale made an incision through the integuments four and a half inches in length, extending forwards from the outer edge of the sacro-lumbalis and longissimus dorsi muscles, midway between the lower ribs and the crest of the ilium, nearly parallel to the latter. The different layers of aponeurosis and muscle having been divided in succession upon a director, a considerable mass of fat was forcibly protruded at the wound. By the finger the packets of fat were detached, and the posterior surface of the colon was very readily felt, extremely tense and elastic, and was soon exposed to view, its pale blue tint and translucent aspect contrasting strongly with the opaque white fat in the neighbourhood. Two temporary ligatures were passed through the muscular and mucous coats of the colon, and a considerable quantity of air escaped through the punctures, which so far diminished the tension of the intestine, that Mr. Teale was enabled to pinch up a fold of it, and to open it with the scalpel, after which there was a profuse discharge of air and liquid feces. The opening in the intestine was further dilated in a vertical direction by a probe-pointed bistoury to such an extent as to allow of the introduction of three fingers. The edges of the intestinal aperture were then fixed to the external wound by four points of suture, and the wound of the integuments was united by two twisted sutures. The operation being completed, Mr. Teale and other surgeons present introduced the forefinger into the artificial anus, and ascertained that the colon immediately below the aperture formed a thickened corrugated pouch, from which no opening into the lower part of the intestine could be detected, without instituting a more tedious search than was considered justifiable. The intestinal tunics forming this pouch, although much thickened and firmer than natural, did not communicate to the touch the indurated feeling of scirrhus. On passing the finger upwards into the descending colon, it was found to be capacious, its coats thin and elastic, possessing a perfectly healthy structure.

The patient was carried to her ward at six o'clock.

10, p.m. Pulse 109, softer; abdomen much less tumid and tympanitic; there is a free discharge of liquid feces from the wound; she is quite easy and tranquil; the temperature of the skin natural.

March 2, eight, a.m. She has slept a little at intervals, and expresses her gratitude in strong terms for the relief she has obtained. Pulse 100; tongue rather dry, and coated with a brown fur; fecal discharge thicker; she takes liquid food freely.

7, p.m. Copious discharge from the wound; abdomen less tense; tongue cleaner at the edges.

2. Has passed a comfortable night; feels easy; pulse 108; fecal discharge more consistent, and occurring at intervals; abdomen softer, and perfectly free from tenderness on pressure.

3, eight, a.m. She has slept tolerably, but has been occasionally disturbed with cough, and mucous expectoration.

6, p.m. The twisted sutures removed; wound of integuments united, but its edges slightly inflamed; cough and expectoration troublesome. A poultice to be applied to the wound, and turpentine embrocation to the chest; an expectorant mixture to be taken.

4. She has passed a good night; pulse, 90; tongue cleaner, and more moist; urine retained; catheter introduced.

Evening. Pulse 90; tongue moist, and nearly free from fur; abdomen soft, and free from tenderness on pressure.

5. She has slept but little during the night, having been much troubled with cough; the discharge from the wound continues abundant, and is more consistent; pulse 116.

6. Has passed a restless night; bronchitis increased; mucous rattle distinctly audible in both sides of the

chest; pulse 130, feeble. To take a draught containing chloric ether and aromatic spirit of ammonia every third hour; a blister to be applied to the chest; half an ounce of wine to be taken, with liquid nourishment, every third hour.

7, eight, a.m. Has been much troubled with cough during the night, and has slept but little; pulse 130, weak; countenance anxious; scarcely any fecal discharge.

2, p.m. She has had some rest, and expresses herself as feeling much more comfortable; pulse 115; temperature of skin natural. She takes her wine and liquid nourishment freely; the abdomen is soft and free from tenderness on pressure; the unnatural tumidity has disappeared, except a little on the right side.

At five, p.m., she became suddenly exhausted, and the skin cold and clammy. She did not complain of pain, but rapidly sunk, and died at half-past seven, p.m.

Examination of the Body Four Hours after Death.

On opening the abdomen a considerable quantity of liquid and solid fecal matter was found in the pelvis, and a large ragged opening, through which the feces had escaped, was seen in the cæcum. The coats of the cæcum were extremely thin and softened, and dilated into a large pouch, which adhered to the neighbouring folds of intestine. The mucous membrane of the cæcum was of a deep red colour, and exhibited some small superficial ulcers. These morbid appearances were entirely limited to the cæcum. The ascending, transverse, and descending portions of the colon were empty, and appeared perfectly healthy. The artificial opening had been made at the lower part of the descending colon. The site of the operation could not be detected by examining this portion of intestine from the opened cavity of the abdomen, nor was there the slightest trace of peritoneal inflammation, or lesion of the peritoneum, in the neighbourhood of the descending colon. Immediately below the artificial opening the coats of the intestine were thickened; the mucous membrane had a granulated feel, and there existed at this part a firm, circular stricture, that would only allow of the passage of a full-sized urethra bougie. This stricture was situated eighteen inches above the anus. Below the stricture, as far as within six or seven inches of the anus, the intestine was reduced much below its natural calibre, but its coats did not exhibit any obvious alteration of structure. So great was the contraction of this part of the tube, that the tip of the forefinger was very tightly embraced by it throughout its whole extent, but by using a considerable degree of force the coats of the intestine admitted of being dilated to such a degree as to allow the forefinger to be pushed through successive portions of the tube, until it reached the upper part of the sigmoid flexure, when it was firmly arrested by the unyielding and contracted coats of the bowel; these, however, did not exhibit in the slightest degree the induration or altered structure characteristic of carcinoma.

The left pleura presented numerous recent adhesions. The bronchial mucous membrane was a little injected, particularly in the smaller ramifications. A small portion of the middle lobe of the right lung was hepatized; heart and pericardium healthy.

blood:—Mrs. —, a delicate and most interesting lady, aged 24, a week or ten days after her confinement of a still-born child, was seized with pain at the lower part of the abdomen, extending to the liver; and other symptoms which indicated inflammation of the cervix uteri, together with much constitutional disturbance. The case appeared to have been mistaken in the beginning, so that it was allowed to become somewhat inveterate before the appropriate treatment was adopted. At this stage of the disease she fell under my care, when I found the uterus in so irritable and painful a state, that an examination conducted in the most gentle manner gave exquisite pain, which lasted several hours. It was treated with leeches to the hypogastrium, cupping low in the loins, hip bath, aperient medicines, strict abstinence, &c. The benefit from cupping over the sacrum was observed to be so decided, that recourse was had to this remedy twice or thrice a-week regularly. The disease seemed to be thus yielding in the most favourable manner, when the patient became suddenly, and quite unexpectedly, affected with the effects of loss of blood in a most violent form. The quantity of blood taken by cupping had frequently been twenty ounces; and too exclusive attention had been paid to the disease, the state of the constitution not being sufficiently watched. In this manner the patient became affected all at once, after being cupped, with sudden and alarming syncope; she gasped, and became convulsed, and afterwards slightly delirious. The admission of cold air, and the administration of brandy, gradually restored the patient to sensibility; but she remained exceedingly feeble. On the next morning she complained of extreme pain in the head, violent throbbing of the temples, and had slight delirium and sickness; I found the street covered with straw. During this day the pain of the head, the throbbing, and the intolerance of light and sound, had increased so much, with sickness, feverishness, and a frequent strong pulse, that I apprehended inflammation of the brain had taken place, and had actually tied up the arm for blood-letting; but the remonstrance of the patient, the history of the attack, and the recollection of some remarks on the effects of loss of blood, read some years before, happily led to the abandonment of this measure. Fortunately, both for my patient and myself, her repugnance to general bleeding prevented me from using the lancet, and so saved her life. I prescribed leeches to the temples, a blister to the nape of the neck, and a cold lotion to the head; opiates and the effervescent medicines were immediately rejected. She became much better, and earnestly requested to be allowed a little brandy, which I gave her; it obviously afforded much relief, and I began to see clearly the nature of the case. From this time light cordials, a mild diet, rest, quietude, a strict attention to the state of the bowels, constituted the treatment; and were followed by a gradual and progressive amendment. Some of the symptoms remained, however, for a considerable time. The pain in the head continued troublesome for many weeks, and a pulsatory movement in the side of the neck harassed the patient for several years. In this case the effects of the loss of blood stole on me almost imperceptibly, and I was not then aware that such symptoms, as experience has convinced me, would arise. This case has also made me attend very much to the prejudices of a patient ever since, and carefully examine whether they be well founded. In this instance I really believe my yielding to them saved the life of my patient.

I watched this case with the most intense solicitude, during this period of imminent danger, for many days and nights. Her complete recovery rewarded all my pains; and I had, moreover, the satisfaction of finding that not a vestige of the original disease remained. She soon became pregnant, and bore several children afterwards. Some years after I was called to visit her, at a distance of one hundred and fifty miles, and

ON THE EFFECTS OF LOSS OF BLOOD.

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CASE I.—The following case illustrates, in a very striking manner, the great advantages of carrying blood-letting sometimes to a fearful extent, and the state of reaction as an effect of repeated losses of