On a case of internal strangulation of the bowel by a band, associated with a reducible hernia : successfully treated by operation, with remarks / by Thomas Bryant.

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ASSOCIATED WITH A REDUCIBLE HERNIA;

SUCCESSFULLY TREATED BY OPERATION.

WITH REMARKS.

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On December 31st, 1866, I was asked by Dr. Wilkinson, of Sydenham, to see with him a gentleman, æt. 51, who had been ill for several days with symptoms of intestinal obstruction. The patient, Mr. H—, had been the subject of an inguinal hernia on the *right* side for twenty-five years, for which he had worn a truss; during that period the bowel had come down on several occasions, but it had only given trouble on one—some six months previously.

On the morning of December 28th, during the exertion of dragging up a tree, the hernia partially descended, but it was at once readily returned on the application of the hand; vomiting, however, soon appeared, and pain situated on the

right side of the umbilicus. These symptoms continued on the 29th and 30th, and increasing in severity, Dr. Wilkinson was sent for. I may here add that Mr. H—'s previous health had been good, and his bowels regular. In infancy he had disease of the left hip-joint, which had become anchylosed.

On December 30th a careful examination was made, but no hernia was found; there was a large opening into the abdomen, in the region of the inguinal canal, through which the extremity of the finger could be passed, but no swelling was present, and not even pain on deep pressure being made. The cause of the symptoms was evidently obscure.

On December 31st, or the third day, the symptoms remaining unchanged in character, and becoming more severe—the vomiting being fæcal and constipation present—Dr. Wilkinson, who saw the immediate necessity for an operation, requested my assistance.

When I saw the patient at 2 p.m. I found him in bed, with a somewhat anxious countenance. He had recently vomited fæcal matter and was constantly retching. He complained of a fixed pain on the right side of the umbilicus, which became at times worse and paroxysmal. The abdomen was evidently abnormally distended, but it was not tense. The seat of the old hernia on the right side was carefully examined, and the ring through which the hernia had descended made out, but nothing like a swelling, or even pain on pressure on the part, could be detected. The groins were also carefully examined for a femoral or even an obturator hernia, but without result. The patient was made to stand, in the hope that under such circumstances some slight evidence of a hernial swelling might become manifested, but without effect, no trace of any such condition making its appearance.

From the fæcal vomiting and constipation there was no room for doubt that intestinal obstruction existed; from the absence of any fulness or pain even on pressure in the seat of the old hernial swelling, and in the femoral and inguinal regions, it was difficult to believe that the symptoms were due to any ordinary hernia; one thing only seemed clear, that death was

imminent if relief was not given; under these circumstances I deemed it right to suggest the propriety of an exploratory operation, and in this suggestion Dr. Wilkinson cordially coincided. The difficulties of the case were then explained to our patient, who was unusually intelligent, and his assent readily secured.

The seat of the old hernia was naturally selected for the exploratory incision, and more particularly as it was a few inches above this spot that the fixed abdominal pain had located itself. Dr. Wilkinson and Mr. Giles kindly gave every assistance; chloroform was given by Dr. Wilkinson, and during its administration some retching took place; it was then thought that a slight bulging became visible in the seat of the old hernia, but this was not very marked.

The incision was made in the right groin over the inguinal canal, and the ring of the old hernia carefully exposed; the sac of the hernia was opened, and a small piece of adherent omentum found. The abdominal opening through which the hernia had descended was then clearly made out to be on the inner side of the inguinal canal, proving that the hernia had been a direct one; it was as large as a sixpence; through this and within the abdominal cavity some small intestine was then seen, of a bright cherry colour; to the touch this felt thickened, and was evidently œdematous. All these parts were then carefully explored; the neck of the hernial sac was drawn down, and the finger introduced through the hernial opening into the abdominal cavity, but nothing abnormal could be found, and no evidence of strangulation of the bowel by any of the parts which had entered into the formation of the hernia made out. The finger could be moved readily in every direction within the abdomen. Under these circumstances the coil of intestine, which was injected and œdematous, was carefully withdrawn through the abdominal opening, which had been previously enlarged, and dragged gently downwards; the index-finger of the right hand was passed along its lower border into the abdomen towards the spot at which the patient had complained of the fixed pain, near the umbilicus, and when it had passed completely out of sight, and as much traction

had been made upon the bowel as was deemed prudent, a tight, tense, fibrous band was happily detected, about the thickness of an average whip-cord, passing across the bowel, which had been drawn down, and evidently strangulating it. The cause of the symptoms had thus become tolerably clear, for the strangulation of the bowel by the band explained them all, and the next question arose as to its division, for the band was placed so high up within the abdomen that it could not be brought into view, and even with scissors there would evidently be some difficulty in dividing it with safety. The abdominal opening was consequently again enlarged upwards; making the whole incision about two inches long, and the strangulated bowel brought, with its constricting band, more under control. The fibrous cord was then easily made out, for the end of the finger could be passed fairly beneath it, and Dr. Wilkinson and Mr. Giles readily satisfied themselves as to its nature. The finger of the right hand was then, as before, introduced along the bowel, which Mr. Giles kindly drew down and steadily held; its extremity was passed beneath the band, which was thus rendered tense, and a pair of scissors introduced upon the finger; the points were kept carefully closed and imbedded in its pulpy portion;—this precaution having been taken with the view of guarding the intestines which pressed around from being wounded—when the band was reached it was cautiously divided, the scissors being opened sufficiently far, and no farther than, to cut it through. The band was so gristly that its division was clearly heard, and when completely divided it gave way with a distinct noise. The strangulated bowel was thus freed at once; the wound was therefore carefully adjusted and closed with sutures, a pad of lint was applied and fixed in position by a bandage, and a suppository of opium given.

When the patient had recovered from the effects of chloroform he expressed himself as being comfortable. He had lost the pain he had endured for the three days, and was quite easy.

The following day, when I saw him with Dr. Wilkinson, at 3.30 p.m., or about twenty-four hours after the operation, I found that he had been quite comfortable since the operation,

that no vomiting or abdominal pain had taken place; he had passed a quiet night, having slept at intervals; his pulse was of good power, 90; countenance quiet and free from anxiety; tongue moist; abdomen flaccid. He had taken three grains of opium during the twenty-four hours and a little ice. Some ice and milk were ordered for him, and another pill of opium at night should it be required.

On January 3rd, or second day, he was going on as well as possible; he had passed a good night and was free from pain. He had passed flatus per anum during the night. There was no single symptom to cause alarm. The wound was healthy and had nearly healed. Beef-tea and bread were ordered.

A daily report after this date is clearly unnecessary, for everything went on as satisfactorily as could be wished. The bowels acted naturally on the evening of the third day, and again on the fourth and fifth; he then took solid food and some little wine. When I saw him again on January 8th, or the ninth day after the operation, he was convalescent; the wound had nearly completely closed, and in all other respects he was well.

Remarks.—I have been induced to bring this case before the notice of the Fellows of this Society from the belief that it is of sufficient rarity to be worthy of their attention, and from the feeling that it is a type of a large class of cases in which surgery has hitherto done but little; but in which I am disposed to believe that there is much to be done.

The case must be regarded essentially as one of internal strangulation of the bowel from a fibrous band; the hernia had evidently nothing whatever to do with the symptoms; it was an accidental association of the more serious condition. It is true that it is possible the presence of a hernia for twenty-five years might have led to the formation of the internal band, and have thus been an indirect cause of the strangulation; but there is no positive evidence that such was the case, for these internal bands are found at least as frequently without the existence of a hernia as with, if not more so. Practically, the two conditions must be regarded as

distinct, and as having no relation to one another. When I first saw the case, and had carefully gone into its history and reasoned upon the symptoms, I was disposed to think that it was one of two classes; that it was one of the class of cases which Mr. Birkett has so ably described in this Society, and that the strangulated bowel had been returned into the abdomen unrelieved, and was pushed upwards between the peritoneum and abdominal fascia; or that the symptoms were altogether independent of the hernia, and were due to the presence of an internal band by which the bowel was strangulated.

That the case before us belonged to the first class of cases was not very clear, for all existing evidence went to show that the hernia had nothing whatever to do with the symptoms, for there was no partial reduction and return of the hernia, no fulness in the seat of the abdominal opening, no pain even on firm pressure over the part; the hernia was also a direct one. Still, there were the possibilities of the case which raised the question. On the other hand, the evidence that the case was one of strangulation of the bowel from a fibrous band was not clear, for such cases are unfortunately always obscure; still, from the fact that strangulation of the bowel evidently existed, that the pain was fixed in one spot and paroxysmal, the suspicion of its true nature was excited; and the vivid recollection of another case of a similar kind, in which the patient died without relief, tended to confirm the idea I had originally formed.

The case to which I have alluded was the following; it occurred seven years ago.

CASE 2.—*Case of internal strangulation of the bowel by a band, associated with a scrotal hernia.*

On the 19th of January, 1860, I was called by Mr. Green, of the Old Kent Road, to see a patient, J. C—, æt. 34, who was suffering from severe symptoms of strangulation of the bowels. He had been ill sixteen hours, the attack coming on suddenly with intense pain in the abdomen, accompanied with vomiting. There was a hernia in the left side of his

scrotum, which had existed five years, and for which he had worn a truss; a small portion of the hernia, however, had always been down. When his symptoms first appeared the hernia had suddenly enlarged and he was unable to reduce it. Mr. Green was sent for, and returned a portion of the contents of the sac, but the symptoms continuing, he sought my advice.

When I saw him he was vomiting a yellow bilious fluid, and was in severe pain about the umbilicus. His abdomen was neither very tense nor very tender upon manipulation. The scrotal hernia was large, but flaccid and painless. His countenance denoted extreme anguish. Pulse small and rapid; skin bedewed with a cold sweat.

The symptoms of intestinal obstruction being thus very marked, and a hernia existing, chloroform was given, and under its influence an attempt was made to reduce the contents of the hernial sac, but with no permanent effect; for although a portion was returned and the patient asserted that the hernia had been reduced to its natural size, the symptoms persisted and soon became aggravated, paroxysms of pain attacking the patient.

Three hours subsequently herniotomy was performed; omentum was alone found in the sac, but no intestine; the mass of omentum had evidently been down for some years. The finger could be readily introduced into the abdomen, but no signs of strangulation by any of the parts which had entered into the formation of the hernia could be made out.

After the operation the patient expressed himself as being relieved. Opium was ordered in full doses.

The next morning (20th) he was more comfortable, having passed a tolerable night; he had vomited but once, an hour after the operation, and had been free from any severe paroxysm of pain; his abdomen was firm, but not much distended. He was ordered to continue the opium.

On the evening of the 21st I was hastily called to see him, as he had been again seized with a severe paroxysm of abdominal pain. I found him with a cold clammy skin, sunken eye, and almost imperceptible pulse. His abdomen

was slightly tympanitic, although not tender, for firm pressure could easily be tolerated; he had not passed anything by the bowel, nor any urine. A catheter was passed, but only an ounce and a half was drawn off. It was too evident that he was sinking, and that any operative interference was clearly hopeless. He died eighty-eight hours after the first symptoms, and sixty-eight after the operation of herniotomy, in a severe paroxysm of pain in the epigastrium, attended with vomiting.

The necropsy revealed the true seat of the malady and that the hernia had nothing whatever to do with the symptoms. Some feet of the middle of the small intestines were found much distended, of a black colour, and almost gangrenous; they had evidently been strangulated by a small string-like band about an inch and a half long, which passed from a piece of intestine backwards to the mesentery near the promontory of the sacrum. The division of this band at once freed the bowel, and it was clear that this operation could have been readily done during life.

Remarks.—The analogy between the two cases I have related was so great that it was impossible for me in the first one, not to entertain the idea that the cause of the strangulation of the bowel was of the same character as the post-mortem examination of the last had revealed to me.

In that case, when it was clear that the seat of strangulation was not in the parts which formed the hernia, the idea of opening the abdomen more freely than had been done in the herniotomy, with the view of giving relief, was entertained, but unfortunately abandoned; and when it could have been carried out the time for doing so had passed away, for the patient was at death's door. But in the successful case to which I have drawn your attention no obstacle existed to prevent the adoption of the practice which had been suggested, and the result of the treatment must be regarded as being most satisfactory.

In both cases there was distinct evidence of intestinal obstruction; in both the pain was situated in one spot, and was of a paroxysmal nature; in both hernia existed, but in

neither was there any pain in the tumour, nor any tenderness, even on manipulation or pressure. In the fatal case a simple enlargement of the abdominal wound upwards would have enabled me to have reached and, I take it, to have divided the band by which the bowel had been strangulated. In the successful case this practice was carried out with a good result. I am disposed to believe that in many other cases of intestinal obstruction, when the symptoms are marked, the pain fixed and paroxysmal—whether with or without a hernia—relief may often be afforded by an operation, when they are now left to die; for we know by purely medical treatment, in a large proportion of cases, little or no good is to be achieved. Even the use of opium in some has its drawbacks, for it may, as in Case 2, mask the symptoms and mislead. An exploratory incision might be made on the outer border of the rectus muscle on the side indicated by the fixed pain, and through this relief to the strangulated bowel might be given. It is foreign to my present purpose, however, to enter more fully into the subject of internal strangulation of the bowel than the cases I have brought forward appear to justify, but I may be pardoned for expressing an opinion that there is yet much more to be done by surgery in these affections than has hitherto been attempted, and a hope that the cases I have had the privilege of bringing before the Society will do something towards its realisation.