ON A CASE OF EXCISION OF CÆCUM AND ASCENDING COLON.

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OPERATIONS involving removal of portions of the alimentary canal are now, thanks to the improvement in the technique of abdominal surgery so frequent, and the reports of successful cases are so numerous, that I feel I am making a large claim on your indulgence in asking you to listen to the details of yet another case. There are in it, however, one or two points of interest which, in my opinion, justify me in putting it on record. The details are as follow :—

H. M., aged forty-three, was admitted to the Mater Misericordiæ Hospital in September, 1903, suffering, it was said, from recurrent appendicitis. His previous history was that up to seven months before coming to me he had been quite well. He then began to suffer from attacks of pain, which were referred to the neighbourhood of the right iliac fossa. These pains were severe, lasted for a few days, and then disappeared. The intervals between the attacks were at first considerable—generally three or four weeks. For the last two months the pains had been more frequent, occurring about every ten days, and in the intervals the region remained tender to pressure. His bowels during the whole of this period had shown a tendency to be confined, requiring generally purgatives to make them act. He had not noticed any loss of flesh till about a month before his admission, but during this period he had noticed a distinct decrease in his weight.

On examination he was found to be a fairly well-nourished man, who looked his age, but nothing more. His appetite was

fair, his tongue a little large, and slightly coated. Heart and lungs were normal. The abdomen was slightly full, and in the right side a swelling could be made out, somewhat tender on pressure, and situated on a somewhat higher level than one would expect if it had its origin in connection with the appendix. A line drawn horizontally round the body from the top of the iliac crest would correspond to its lower limit. Bearing in mind the history of the repeated attacks of pain in the right iliac region, and the fact that he was sent to me to have his appendix removed, by a doctor whom I knew to be a careful man, the diagnosis of recurrent appendicitis was made, though there was a lingering doubt in my mind caused by the situation of the swelling.

Having ascertained that the urine was normal, I proceed to operate, with the assistance of my colleague, Mr. Lentaigne. I made the usual oblique incision for appendicectomy and, separating the muscular fibres, opened the peritoneal cavity. I then brought up the appendix into the wound, and found it somewhat thickened, and with some firm adhesions to the adjoining parts. These were separated, the mesentery tied off, and, following the course I usually adopt, the appendix was cut off flush with the cæcum, and the aperture so caused closed by a continuous suture of catgut. Although the appendix showed evidence of having been involved in chronic inflammation, I had not encountered any thickening sufficient to account for the tumour which I had felt through the abdominal wall, so that having disposed of the appendix, I proceeded to examine further with my finger. On passing it upwards, I found above the cæcum a hard mass occupying the wall of the ascending colon, and bound down to the posterior aspect of the abdomen, evidently cancerous in its nature. In order to get a full view of this, I enlarged the aperture in the abdominal wall, cutting through the muscles, which had previously been only split. The growth was then found to infiltrate the walls of the ascending colon immediately above the cæcum. It was obvious that to remove it completely it would be necessary to encroach considerably on the cæcum, and it seemed to me that the easiest course would be to remove the whole cæcum with the tumour, and to implant the lower end of the ileum on the large intestine above the growth. As this also recommended itself to Mr. Lentaigne, I doubly clamped the lower end of the ileum, and divided it between. I then proceeded to dissect up

the colon from the posterior abdominal wall, to which it was closely adherent, till I had freed it for about four inches above the tumour. The colon was then doubly clamped and divided. The lower end of the ileum, the cæcum, and ascending colon were now free, save where they were held on their inner side by the vessels. These having been tied off by three or four interlocking ligatures, the whole mass was cut away. There remained now the question of restoring the continuity of the alimentary canal, and this I decided to do by implanting the ileum on the transverse colon, as there was not a sufficient length of ascending colon left to which it might be attached. Before removing the clamp on the colon, a continuous suture of silk was passed through the walls as they were held opposed by the clamp, the loops passing over the blades of the latter and lying loose till after its removal. They were then drawn tight, one after the other, thus securely closing the lumen. A second row of continuous suturing, taking up muscular coat, was then inserted and drawn tight, thus burying the first line. It is interesting to remark here that a considerable area of the colon at this place is devoid of serous covering, so that the sutures brought together the muscular coats of the intestine without any interposed peritoneum. This condition of the large intestine is not so favourable for rapid union as when in the small, two peritoneal-curved surfaces are brought together, and, as will be seen later, some leakage occurred about this area. The colon having been closed the implantation remained to be done, and I used the Murphy's button to effect this. I believe that this is the ideal place for the use of this mechanical aid. The contents of the small intestine being liquid, no obstruction is likely to arise while the button is in position. When it has become free there is no proximal cavity into which it may fall, such as there is in the operation of gastro-enterostomy. The peristaltic action of the small intestine must drive it into the large, and the size of the button required is such that it will readily pass along the large intestine. There can be no question that with a properly made button the union, secured immediately, is more secure than that obtained by any method of suture, and, notwithstanding all statements to the contrary, the time necessary to complete the junction is much less than by any other method. I am not by any means an advocate for the frequent use of Murphy's button. I have seen very serious trouble follow on its employment, but I have

no doubt that for the implantation of the small into the large intestine it is much the best method.

The union between the ileum and colon having been completed, the area of operation was flushed out with sterile saline solution, a gauze drain was inserted down to the line of suture in the ascending colon, and the wound closed by through and through sutures of silkworm gut. The operation, owing to the preliminary appendicectomy, had lasted for some considerable time—about an hour and a half—but the patient was in a good condition when he left the table. The subsequent progress of the case was marked by but one complication—namely, that about four days after the operation there was some leakage of fæcal matter along the track of the gauze. I have already pointed out what I believe to be the reason of this—namely, the absence of serous covering from the ascending colon. It was this which led to my introduction of a drain here—a course which the subsequent leakage showed to be necessary.

The amount of fæcal matter was never at any time great; it consisted merely of a small quantity of fluid, with a slightly foul odour, staining the dressings a brownish colour. It did not interfere with the healing of the wound, which took place by first intention, except along the track of the drain. At the end of a fortnight the discharge ceased, and the fistula at once began to close. It is of some interest to note that the silk used in closing the colon did not come away, although it must have become infected by the discharge, nor did it subsequently give rise to any trouble. Probably it eventually worked its way into the interior of the bowel.

The button did not give any trouble. About a fortnight after the operation the patient complained to me that he had some slight diarrhoea, which I put down to the button having become lodged in the rectum, and on inserting my finger into the bowel this proved to be the case. It was easily hooked out by the finger, and the rectal irritation at once ceased.

The patient was discharged quite well, and has remained so up to the time I last heard of him, which was recently. He has increased in weight, and has had no pain or trouble since the operation. I have considerable hopes that he will remain free from recurrence, as a considerable area of intestine on each side of the growth was removed, and, in addition, it would seem from

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recent reports that columnar-celled carcinoma of the colon, which the microscope showed to be the disease in this case, is not a very malignant form of growth. There have been many cases reported which remained free from recurrence and were still alive from five to ten years after operation.

I have little to add to the above brief account. I am much indebted to Mr. Lentaigue for his advice and assistance during the operation.