INTUSSUSCEPTION IN ADULTS DUE TO CARCINOMA OF THE COLON

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Intussusception in adults from any cause is rare, and cases due to carcinoma of the colon seem to be extremely rare. A search of the literature of the past 10 years reveals only two cases associated with a carcinoma of the colon. Rose (1945) described a case of intussusception of the descending colon due to a polypus with a near-by, but apparently unrelated, carcinoma of the colon. Iason (1945) described a case of intussusception of the transverse colon due to a carcinoma. Two further surveys dealing with this subject may be quoted to illustrate the rarity of the condition. Eliot and Corscaden (1911) collected up to that time 300 cases of intussusception in adults, only 20 being definitely due to carcinoma. Christopher (1936) could find only 10 cases of intussusception due to carcinoma since Eliot and Corscaden's paper. In view of this, and because they show other unusual features, the following two cases are recorded.

Case 1

A woman aged 72 was admitted with a history of colicky abdominal pain, diarrhoea, and the passage of blood per rectum for the past two weeks.

On examination she was seen to be a thin frail old lady with evidence of recent loss of weight. There was no abnormality detected on abdominal examination. Rectal examination revealed a typical sausage-shaped intussusception which had almost reached the anal orifice, and hence a diagnosis of chronic intussusception of the large bowel was made.

Operation.—Spinal analgesia was used. The abdomen was opened by a lower midline incision. An intussusception of the pelvic colon into the rectum was found. Reduction was, from the first, difficult, but was partially achieved with the aid of an assistant exerting pressure on the apex through the anal orifice. An impasse was then reached, as no further reduction seemed possible. On increasing the reducing force, signs of splitting of the bowel appeared, and as no other means was possible the split was enlarged and complete reduction was achieved. It was now found that at the apex of the intussusception, in the middle portion of the pelvic colon, there was a small annular carcinoma. The split in the bowel was below this in the upper part of the rectum. The condition was further dealt with by excising the portion of the bowel containing the carcinoma and the split. Continuity could not be re-established and so the proximal end was brought out of the left inguinal region to form a permanent colostomy and the lower end was closed with two layers of sutures as in Hartmann's (1923) operation for removal of a carcinoma in the recto-sigmoid region. The rest of the abdomen was not explored because of the danger of disseminating septic material. The wound was closed without drainage.

Recovery was uneventful, and the patient was discharged on the 42nd post-operative day. The delay in her discharge was due to difficulty in obtaining a colostomy belt. The growth was reported as being a mucoid carcinoma. When last seen, almost exactly two years after operation, she was in good health and without any evidence of recurrence of the growth.

Case 2

A man aged 68 was admitted with a history of two weeks' constipation, colicky abdominal pain, and the passage of blood per rectum.

On examination he was seen to be a well-built man in fairly good general condition. Abdominal examination revealed considerable generalized distension and an increase in peristaltic sounds on auscultation. On rectal examination a typical intussusception with a papilliferous carcinomatous mass at the apex was found. It had reached as far as the lower part of

the rectum. A diagnosis of chronic intussusception of the large bowel due to a papilliferous carcinoma was made.

Operation.—Spinal analgesia was used. The abdomen was opened through a right lower paramedian incision. It was found that almost complete reduction of the intussusception had occurred: the cause of this is discussed below. A small knuckle of bowel was still invaginated and reduction was completed easily. It was now found that the intussusception was of the pelvic colon, which was very mobile, and the papilliferous carcinoma could be palpated in its middle portion. There was no evidence of secondary deposits in the liver or peritoneum. The condition was dealt with by resection of the colon containing the carcinoma, together with about 2½ in. (6.25 cm.) of normal colon on either side, by Paul's method. The double-barrelled bowel ends were brought out of a separate incision in the left inguinal region and Paul's tubes were inserted into the open ends.

Examination of the removed specimen showed a papilliferous carcinoma arising from an area about 1½ in. (3.75 cm.) in diameter in the middle of the loop of removed bowel. Microscopically it proved to be an adenocarcinoma.

Recovery was uneventful. The spur of the colostomy was crushed after an interval of three weeks, and the colostomy was finally closed at a second operation 10 weeks after the first. The patient was discharged 12 weeks after the original operation.

An interval of only seven months has elapsed since operation, but when last seen he was very well, with no evidence of recurrence. He had a slight tendency to constipation, but usually had a daily motion with the help of mild laxatives.

Discussion

Diagnosis.—This presented no difficulty in either case, as the intussusception was easily palpable on rectal examination; in fact, in both cases it had nearly reached the anus. The presence of a carcinoma in Case 1 was not suspected until the abdomen had been opened and reduction of the intussusception had been completed. The carcinoma in Case 2 was readily palpable, and hence was diagnosed as the cause of the intussusception before operation.

Methods of Operation.—As this condition is of necessity associated with a long and mobile pelvic colon, Paul's method of resection of the growth would appear to be satisfactory—as in Case 2—and is particularly useful in the old patient who would not stand a more extensive removal. It has the advantage of resection of the colon combined with a colostomy in one procedure, and continuity of the colon can be re-established later without any further major operation. This method could not be used in Case 1 because of the splitting in the region of the pelvi-rectal junction, otherwise it would probably have been the method of choice.

Results.—The unexpected good result in Case 1 was both surprising and gratifying. In spite of the inevitable peritoneal contamination convalescence was uneventful. It is unfortunate, however, that continuity of the colon could not be re-established. The partial reduction of the intussusception which occurred in Case 2 was an unexpected find at operation. The cause could not be determined with certainty, but was probably due to a series of enmata which the patient received before operation. If this is so, it is interesting in view of the fact that this method of treatment of any intussusception has been advocated. It seems, however, that it could succeed only in intussusceptions of the distal colon.

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