

## **Case No. 20**

78-year-old male

### **Past medical history**

Appendectomy  
Gastric resection for peptic ulcer  
Treatment (Bassini) for right inguinal hernia

### **Recent medical history**

The patient complains of longstanding abdominal pain, meteorism, bowel irregularity tending towards constipation.

Disturbances worsened over the last 24 hours, with considerable abdominal distension, nausea and vomiting, bowels obstructed to passage of gas and stool.

For these reasons the patient was admitted to our Division for urgent care.

### **Physical examination**

The patient presented in poor general conditions, due also to his evident state of suffering. Nausea and bilious vomiting. Abdomen poorly tractable due to considerable distension and moderate tenderness in all areas. Bowel empty on rectal examination. Peristalsis present.

Nasogastric intubation led to the draining of a considerable amount of dark biliously-colored liquid.

Abdominal x-ray reveals diffuse hydroaeric levels.

A diagnosis of ileal-mechanical intestinal occlusion is made; emergency surgery is scheduled.

### **Description of the emergency operation**

Xifo-pubic laparotomy. Adhesions from previous operations on the stomach and appendix are found.

Enormous dilatation of the colon, with the long loop of the sigmoid colon positioned retroperitoneally for a lengthy tract.

A small, clearly stenosing, neoplasm of the upper rectum is observed near the rectosigmoid junction (Fig. 1). Ectopic left kidney located in the pelvis is seen.

Lyses of the adhesions; mobilization of the rectosigmoid loop; colotomy of the sigmoid colon. A considerable amount of solid stool is removed.

Resection of the rectosigmoid colon by Hartmann's procedure. Closure of the distal stump with a TA 60 stapler. One staple was used to anchor the rectal stump to the peritoneum; colostomy; suture of the wall.

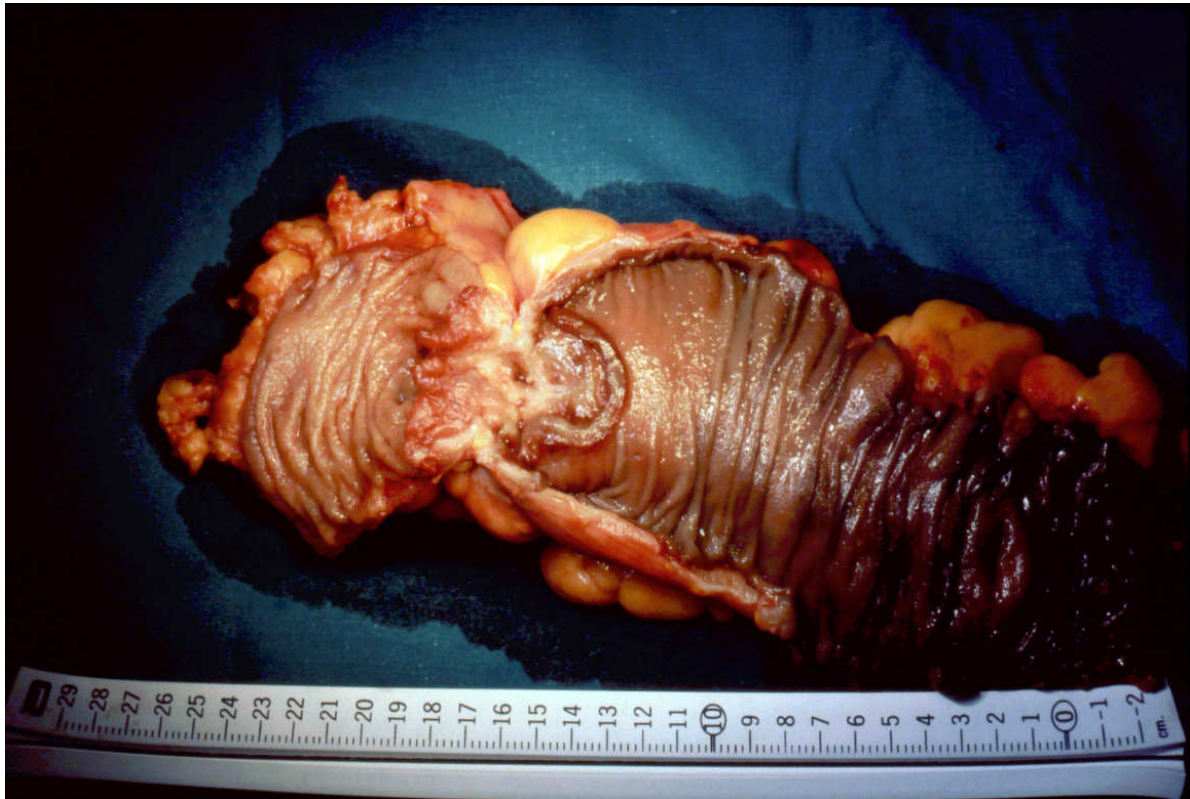


Fig. 1

### Postoperative course

Regular with rapid recovery by the patient. Discharge on the 10<sup>th</sup> day with an appointment scheduled for necessary follow-up tests and possible recanalization.

The patient presented approximately 20 days after discharge in excellent overall general conditions.

Tests performed: standard blood and blood chemistry tests; abdominal ultrasound, chest x-ray, abdominal CT scan and proctoscopy. No noteworthy findings were observed.

### Description of the second operation

Midline xifo-pubic laparotomy, with removal of scar tissue resulting from the previous operation. Extensive adhesions are found that forced a time-consuming procedure of viscerolysis. No manifestations of metastasis are observed. Findings of gastric resection with an antecolic gastroenteroanastomosis. Mobilization of the pelvic kidney is difficult (Fig. 2- 3 - 4): the organ lay sideways, with a short vascular peduncle positioned on the left iliac vessels. A polar artery passes over the kidney anteriorly, and the very short ureter is positioned posteriorly. Rubber bands were placed under all of these structures. Proctoscopy reveals the rectal stump, which is separated anteriorly from the bladder (filled with methylene blue) and laterally to the left from the hypogastric vessels. When introducing a 25 mm PCEA stapler the tendency of the stump to sustain the mechanical anastomosis was confirmed. Mobilization of the left colon. Mechanical end-to-end colorectal anastomosis with 25 mm PCEA stapler (Fig. 5 – 11) Interruption

of the segment used for the colostomy using GIA stapler. Mobilization of the left colic flexure. Mechanical end-to-end colorectal anastomosis with 25 mm PCEA stapler; checks for leaks made with methylene blue. Repositioning of the kidney in the pelvic cavity. Removal of the colostomy stump and suture of the corresponding parietal opening. Toilet of the abdominal cavity. Inspection of hemostasis, intraperitoneal tubular drainage. Layered suture of the wall.

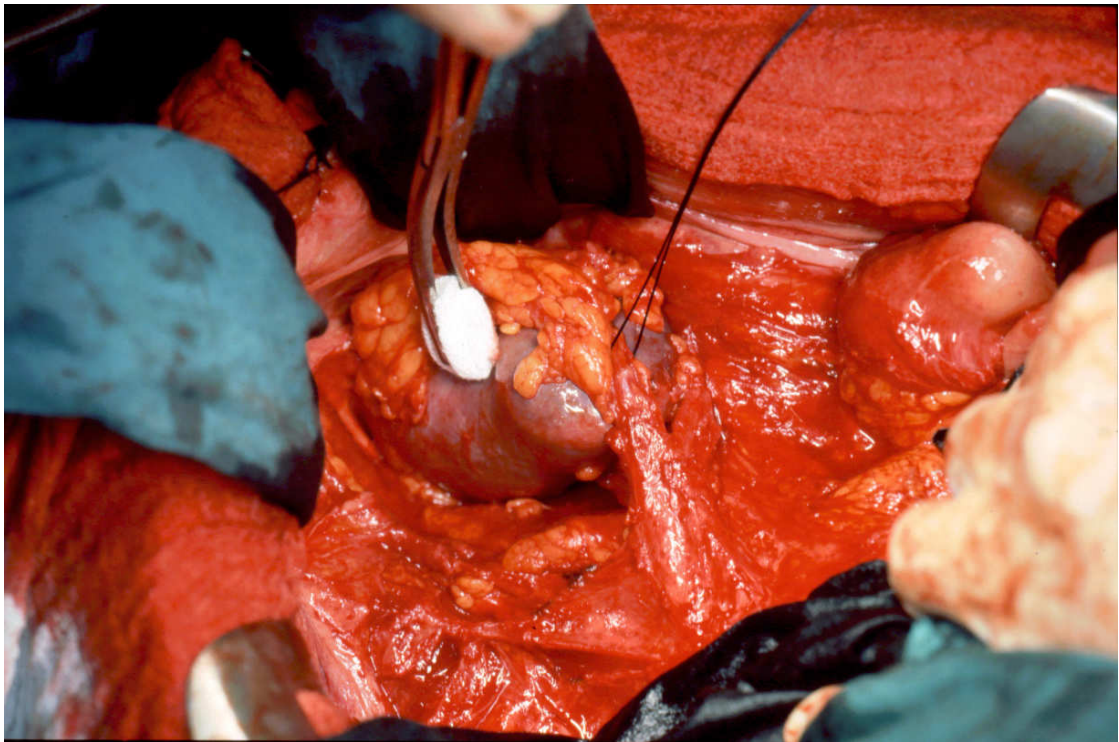


Fig. 2

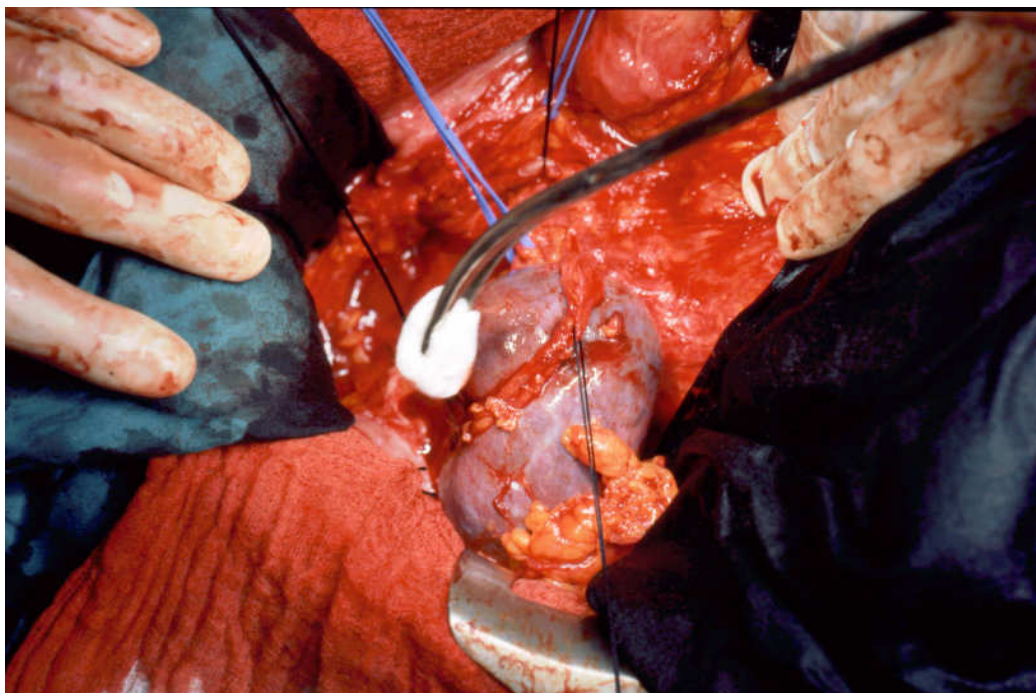


Fig. 3

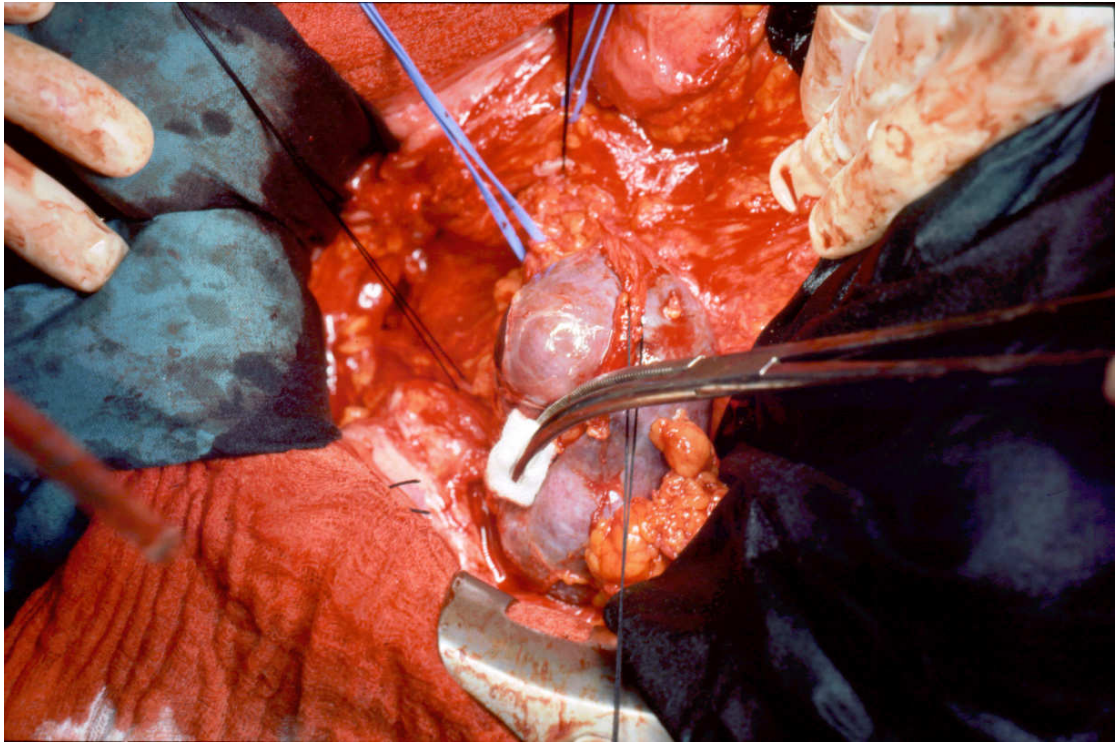


Fig. 4

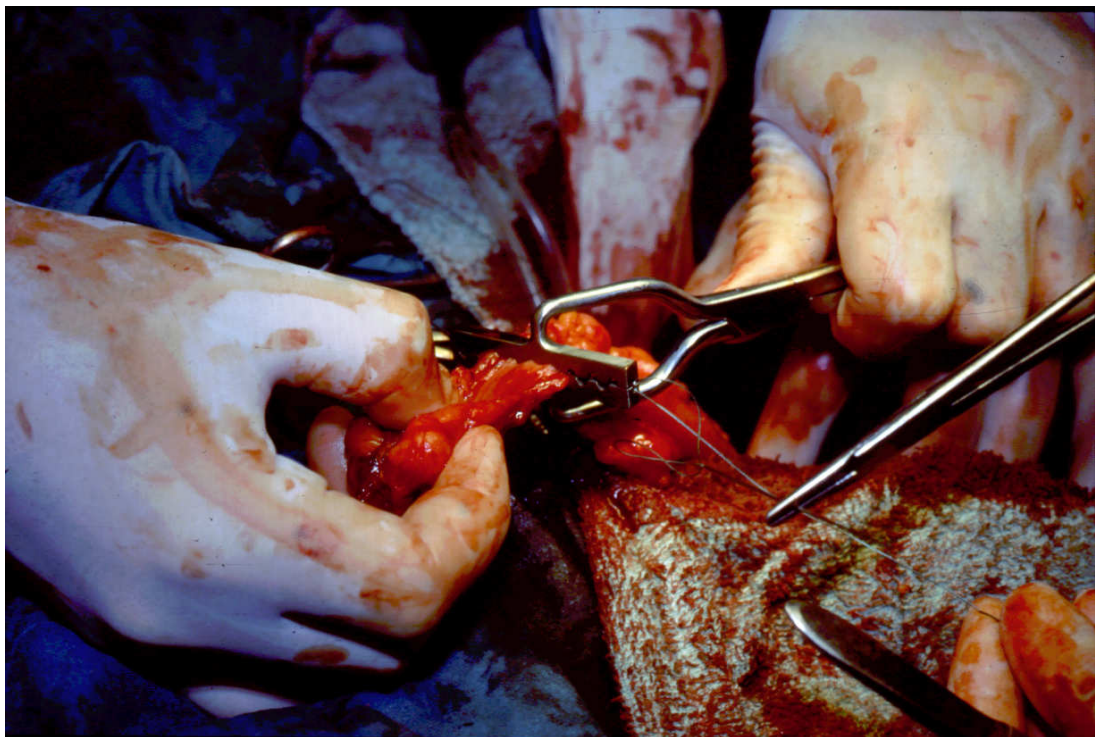


Fig. 5

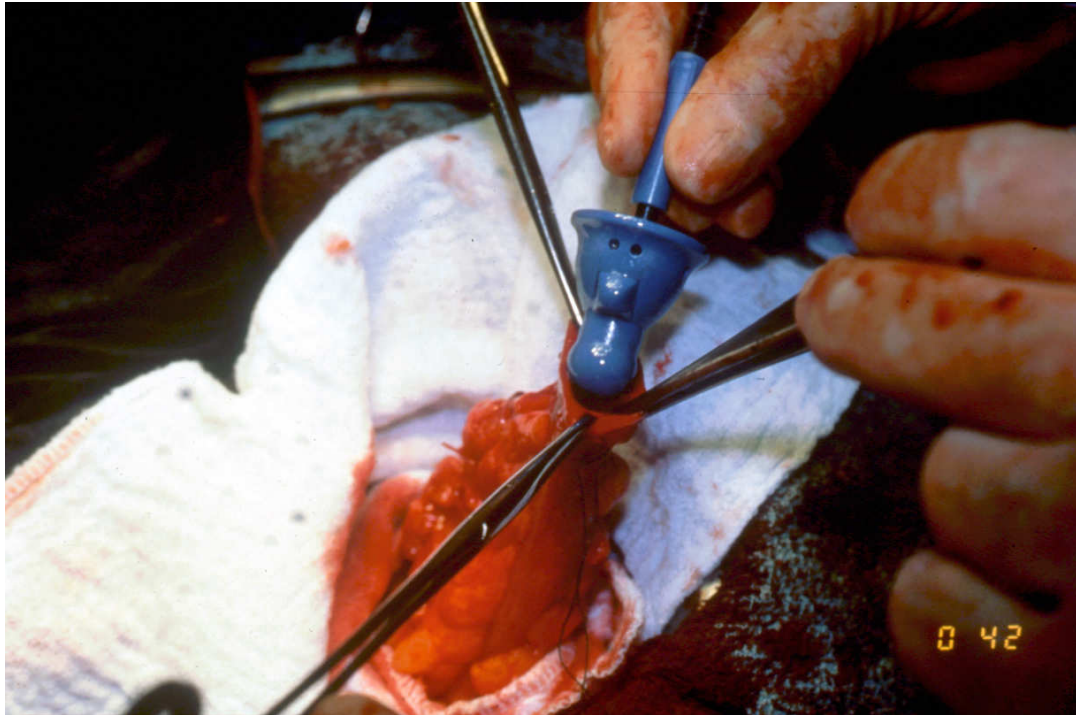


Fig. 6

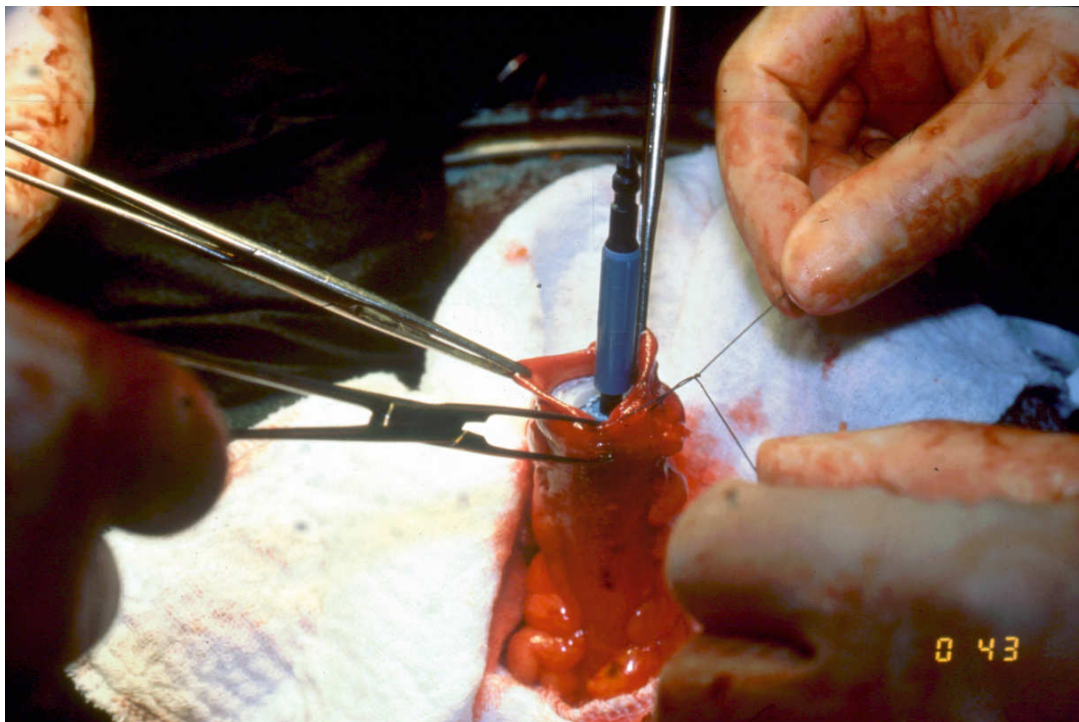


Fig. 7

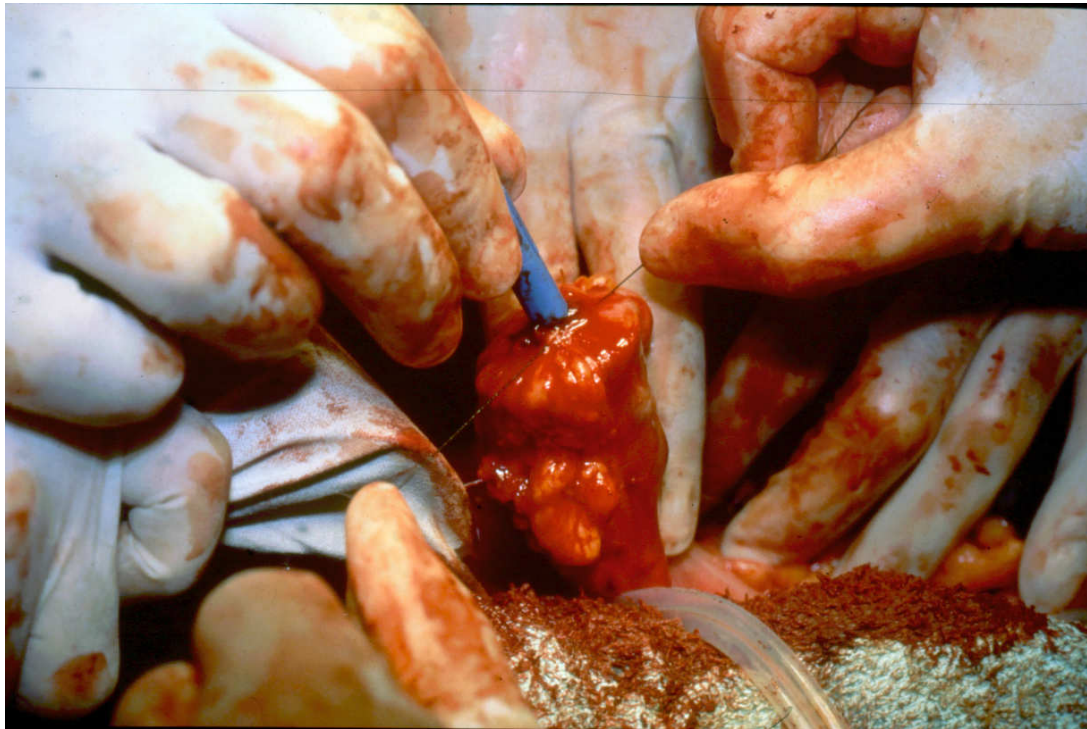


Fig. 8

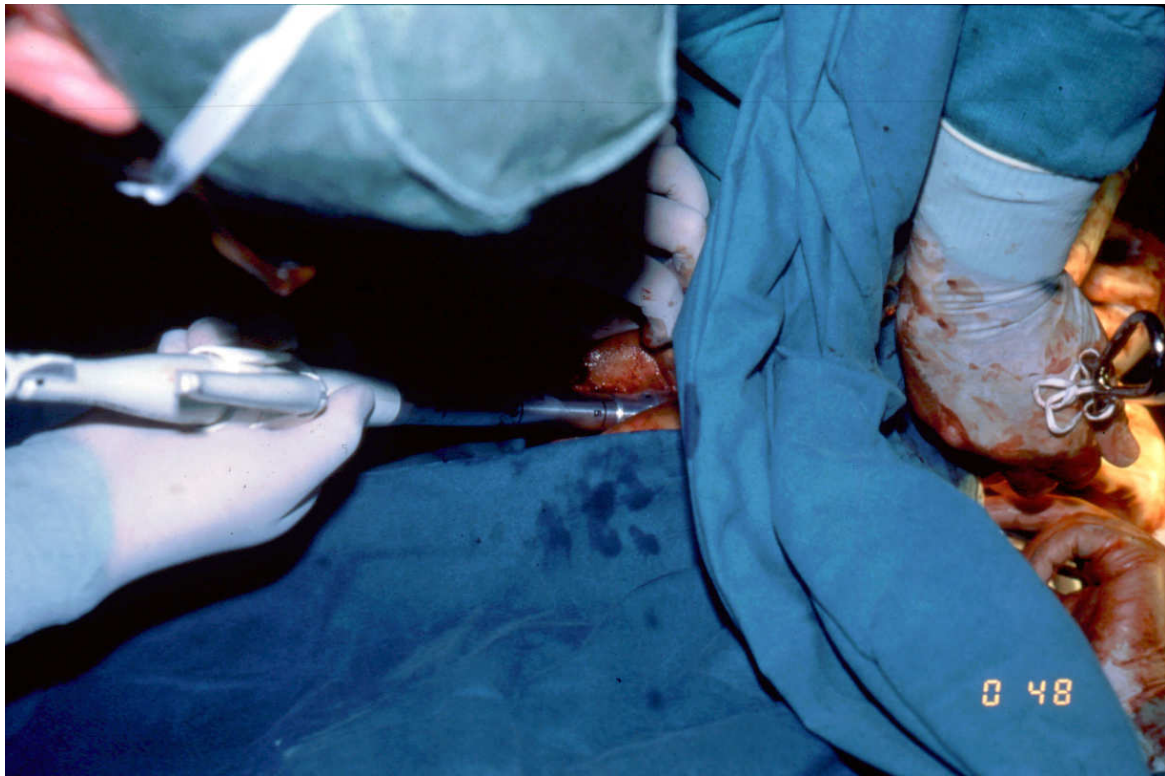


Fig. 9

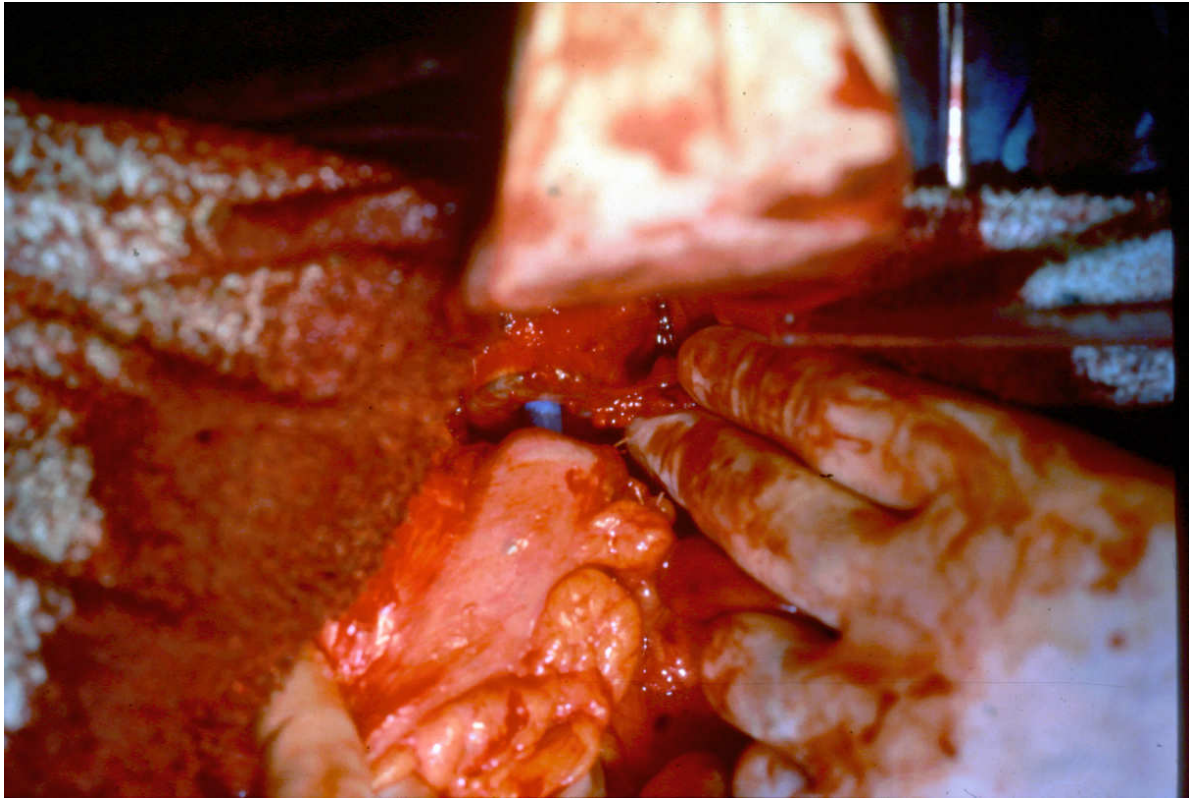


Fig. 10



Fig. 11

## Postoperative course

The postoperative course was regular. The patient was discharged on the 12<sup>th</sup> postoperative day, with long-term follow up entrusted to internal medicine specialists.

## Commentary

We were thus presented with an elderly patient with a past medical history characterized by surgeries, of which gastric resection for ulcerating diseases was the event that more than any other left consequences - adhesions - that interfered with the current surgical procedures.

The onset of the disease that precipitated our involvement was an intestinal occlusion. The syndrome manifested itself in a classical manner, but with important symptomatological features: the noteworthy abdominal distension, the abundant gastric stasis and the resulting vomiting, and the poor general conditions. A clinical picture that obviously prompted immediate surgical intervention.

It is interesting to highlight a few details of the laparotomic picture appearing before us. Firstly, the enormous, unusual and at times occlusive dilatation of the colon, which, in order to proceed with surgical maneuvers, needed to be precautionarily emptied. Normally, the sigmoid loop is extensively free from when it leaves the descending colon until it connects to the rectum. And here arises another observation worthy of note, inasmuch as it strikes us as unusual: in the case in question, in fact, the sigmoid colon, which is, moreover, rather long, is positioned retroperitoneally. This is normal for the ascending and descending colons, but certainly not for the sigmoid loop.

Obviously, the mobilization of this loop, together with the albeit partial lysis of adhesions from previous laparotomies, would have entailed more extensive surgical maneuvers: this is a consideration to take into account in such emergency conditions.

The pelvic ectopy of the left kidney, ignored by the patient and by surgeons in previous operations, was initially observed in the first surgical procedure. The growth responsible for the occlusion was a small stenosing neoplasm of the upper rectum, at the junction with the sigmoid colon; as a consequence, a Hartmann procedure sufficed to resolve the immediate problem.

Which brings us to what is perhaps the most interesting feature of this case: the association of a left pelvic ectopic kidney and rectal cancer. This was an event that we had fortunately never witnessed, and a search of the literature yielded no records of similar observations.

The position of the respective lesions revealed itself to be relatively favorable in our case, given the distance between the neoplastic growth located in the upper part of the rectosigmoid junction and the ectopic kidney situated in the depths of the pelvic cavity. This makes us wonder what and how many difficulties would have arisen if the two disorders had been closer or even adjacent to each other, and/or if the neoplasm had been more invasive. The answers may well be self-evident.



In our case, nonetheless, we were compelled to try to mobilize the kidney in order to ensure the mobility of the rectum, its predisposition to recanalization anastomosis and - last but not least - the possibility of a thorough examination of perirectal structures, starting with the lymph nodes.

As stated above, we have no experience of such an association of a rectal neoplasm with a left pelvic kidney: we hope that colleagues more versed than us on this phenomenon will wish to share their experience. If so, we will make it our task to publish their findings on this website as an addendum to this Clinical Case.

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