THREE LAPAROTOMIES ON ONE PATIENT. RECOVERY.[1]

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PETER M., laborer, æt. 30 years, a strong, stout man, was admitted to the hospital June 28, 1888. An examination revealed acute appendicitis, for which I operated the next day. The case was reported in the ANNALS OF SURGERY, February, 1889.

He returned to the hospital August 12, 1889, with a ventral hernia at the site of the operation. The hernia was pendulous, and formed a tumor as large as the double fist. In the operation to remove the diseased appendix an incision, four inches long, was made, commencing an inch above the center of Poupart's ligament, extending upward and outward. The cicatricial tissue covering the hernia was extremely thin.

I concluded the best procedure would be to make an incision in the center of the cicatrix, cut away all of the same, and bring the sound tissue together. In attempting to execute this idea, I made an incision in the center and in the long axis of the cicatrix, holding it well up, as I supposed, from the intestines. When the knife entered what we took to be the peritoneal cavity, I was mortified to find that I had cut directly into the intestine. Fluid fæces flowed from the wound. The finger introduced showed that the gut was adherent to the entire under surface of the cicatrix—that they were virtually one wall. I next made an opening into the cavity through sound tissue to the inner side of the cicatrix, introduced the finger and attempted to break up the adhesion between it and the intestine. I succeeded in this, but in doing so tore the opening in the gut still larger. I now had the gut denuded of four inches of its peritoneal coat, with a transverse hole in

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it occupying half its circumference. Resection being plainly the only feasible procedure, I then removed four inches of the intestine, together with sufficient mesentery to make the proper V-shape. The mesenteric wound was closed by a continuous silk suture.

In making the circular enterorrhaphy I used Senn's rubber ring, and was extremely pleased to find how quickly it enabled me to finish the operation. The entire operation, from the first incision to putting patient to bed was 35 minutes. I had, however, practiced the operation with the rubber ring quite often in the dead-house.

No fæces escaped into the peritoneal cavity. I had taken the precaution to pull out the intestine, empty it, and have an assistant compress it on each side of the wound to prevent the escape of fæcal matter. The cicatrix was cut away and the wound closed without drainage. It healed by first intention.

The patient stood the operation well. For seven or eight days he had some pain in the abdomen and vomited occasionally, but at no time did his pulse exceed 90, nor did his temperature reach 102° F., except on one afternoon. As he had been given a purgative before the operation, no attempt was made to move the bowels for a week, when enemas were given which produced several actions. About the tenth day a diarrhœa developed which lasted six or eight days. At that time a mild attack of dysentery supervened, which lasted about a week, after which the patient made a rapid recovery. He was out of bed on September 8, twenty-four days after the operation, and in a few days was doing detail work around the hospital.

Unfortunately, the parties watching the patient failed to discover the rubber ring in the fæces, although they were given positive instructions to carefully watch for the same. I take it that the diarrhœa was caused by irritation at the site of the rubber ring.

On September 30, while apparently in the enjoyment of excellent health, he was very suddenly seized with a most agonizing pain, referred to the umbilicus. He was in collapse in less than ten minutes after the seizure. Extremities were cold and clammy, and beads of cold perspiration were seen over his entire person. His pulse was very fast and weak; rectal temperature, 97.5°. He yelled with every breath.

I diagnosticated acute intestinal obstruction, stimulated him very freely, gave morphine hypodermically, and applied heat to the extremities. As soon as possible (in about a half hour) he was put under ether preparatory to laparotomy. His pulse improved under stimulants and ether, and during the operation was of fair volume. Just

before he was etherized he stated that the pain was most intense at the site of the old wound.

Remembering my former sad experience, I was careful to avoid the cicatrix left from the last operation, and hence made a parallel incision about five inches long, an inch to the inner side of the same. The intestines were found so inflamed, thickened and matted together, that it was quite a while before we could positively make out the exact condition, which proved to be three parallel coils or knuckles of intestines, bound down by a band. The inner coil was found to contain the portion through which the circular enterorrhaphy had been made. The band was cut and removed, adhesions broken up with considerable difficulty, and the intestine straightened.

Thinking, perhaps, some narrowing of the gut might have taken place at the site of the circular enterorrhapy, and that this might in part account for the obstruction, we deemed it unwise to close the abdomen without definitely excluding this possible cause of obstruction. Of course, we understood that the band was ample cause for the obstruction, and ordinarily, we would have completed the opera tion as soon as the obstruction by the band had been relieved, but in this case the portion of the intestine formerly operated upon was one of the knuckles caught under the band, and in addition (which was very suggestive of the closure of its lumen) this part was particularly thickened and hard upon pressure. I attempted to determine the patulousness of the intestine at this part, as one would push his finger into the inguinal ring, with the scrotum ahead of the finger. Owing to the extreme thickness of the intestine, this could not be done. An incision large enough to admit the index finger was made, the finger passed in, and the site of the circular enterorrhaphy examined. A very slight constriction was found at this part; not more, however, than could be accounted for by the cicatrix. The wound in the intestine was closed, and, as there had been some fluid (serum) in the belly, it was washed out and a glass drain left in the lower angle of the wound. Patient was put to bed and hot bottles packed around him.

The operation lasted an hour and a half. A half hour after the operation his temperature was 98°, pulse 120, respiration 36. As there had been but little discharge through the tube, it was removed and the opening sewed up on the second day. The patient was then doing well, but on the third day the abdomen was considerably distended and painful to pressure. In the afternoon of that day his bowels moved spontaneously, after which the distention disappeared.

On the seventh day a fæcal fistula was noted. This, however, was not large, and remained open but four days. After this his recovery was uninterrupted. He remained in the hospital four months after the operation, working as a detail around the institution. When discharged he had grown quite stout, and was in the enjoyment of perfect health.

The accidental cutting of the intestine in this case teaches that in operating for ventral hernia the incision should always be made to the side of the cicatrix in sound tissue, as there are no means of determining beforehand in what cases adhesions have taken place between it and the intestine.

Possibly it might have been better not to have operated on this patient; the reduction of the mass and an elastic support might, perhaps, have been better. But when we consider that the tendency of such a hernia is to steadily enlarge, even with elastic support, especially in the laboring classes, we must believe that the operative procedure is the better one.

Had I to perform the operation to-day, I should close the ends of the intestines, employ lateral anastomosis, and should not resect the mesentery, but would close it, as advised by Senn.